PLAYGROUND EQUIPMENT

HILL-STANDARD



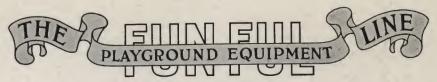
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Catalog No. 10



THIS GOLD MEDAL was awarded to the Hill-Standard Company, by the Brazilian Centennial Exposition at Rio de Janeiro, 1922-1923, because of the superiority of the Fun-Ful line of playground equipment.

FUN-FUL PLAYGROUND EQUIPMENT is the product of twenty-eight years' experience of the Hill-Standard Company, devoted exclusively to the development and manufacture of children's outdoor, health-building goods.

The receipt of a GOLD MEDAL in competition with products of the world, is an event out of the ordinary, and a fitting tribute to a sincere and honest effort, during a long period of years, to produce the BEST for the purpose intended.

HILL-STANDARD CO.

GENERAL OFFICE

ANDERSON, IND.

FACTORIES

ANDERSON, INDIANA KOKOMO, INDIANA

Selling Agents throughout U.S.A., England, Canada, Mexico Honolulu, T.H., Cuba, Philippine Islands and The Argentine.

Printed in U.S.A.

xico N. DOUGLAVE tine. ORRINGTON ILL.



Where We Work

Both plants are devoted exclusively to the manufacture of outdoor goods—the Fun-Ful Line of Playground and Swimming Pool equipment—the Irish Mail Line of children's vehicles—Rol-Rite metal wheels such as used by the baby carriage and wheel toy industries.



Our Guarantee

WE guarantee that the apparatus shown in this catalog is exactly as illustrated and described.

We guarantee to give you full and complete satisfaction when you purchase apparatus from us; that equipment sold you represents full value—best quality—and will give you the satisfaction you have the right to expect.

If, for any reason, you are not fully satisfied with any article purchased from us, we ask you to return it at once, at our expense, and we shall either exchange it for something else, or, if you wish, we shall return your money without question, also transportation charges you may have paid.

HILL-STANDARD CO.
Anderson, Indiana, U.S.A.



HUGH HILL
Founder
Hill-Standard Company



To Our Friends and Customers

T IS with considerable pleasure and much pride that we present this catalog covering our Fun-Ful Playground Equipment Line.

For almost thirty years we have devoted our efforts and resources to the creation, development and manufacture of children's outdoor, health-building play goods. The control and management of this company have been under one and the same head during this time.

We conduct the largest business of its kind, it being represented by almost three hundred agents throughout this country and abroad. Two large factories are operated continuously for the production of these products.

Those desirous of knowing more about our financial responsibility, are asked to consult Bradstreet or Dun, or any of our local banks.

The best engineering practice has been followed in the design and construction of our apparatus; the work-manship and finish are of a higher order than is generally expected of such goods.

All play apparatus here shown has met with the approval of the United States Government, and the leading park and recreation authorities.

We do not offer new, untried or unknown goods or materials—only those that are known to be absolutely SAFE FOR CHILDREN TO USE. Not only are these goods safe and sound and honestly made, but we strive continually to improve and to make them more attractive.

One of the outstanding features of our equipment is—CAPACITY; in other words, Fun-Ful Equipment will serve safely a greater number of children.

In this book we illustrate and describe the greatest line of playground equipment manufactured by one company. This gives the customer the widest possible selection of standard, approved goods.

SHIPPING, ASSEMBLAGE, INSTALLATION: Freight rates on apparatus proper are higher than on pipe, and it is a saving to the customer to have apparatus and pipe billed separately on those outfits requiring both; otherwise, he would be compelled to pay the higher rate on the whole shipment. From the blue prints furnished, assemblage on the ground is a simple matter. With a level, spade and wrench, almost any laborer can install the equipment.

See page sixty-seven for material and labor required for the installation of the different numbers.

PRICES: Prices are as low as is consistent with first-class material, first-class service and first-class work-manship. They are subject to change without notice, and are quoted F. O. B. cars, Kokomo, Indiana.

TERMS: 30 days net.

WEIGHTS: Shipping weights may vary slightly.

ORDERS: Orders are subject to the acceptance and approval of the home office. They should always be written clearly, using catalog numbers. If goods are to be shipped to point other than your address, special note should be made. Use catalog numbers covering galvanized or painted pipe. Slide chutes may have Armco Galvanized Iron or hardwood bed ways, at no difference in price. STATE CLEARLY THE TYPE DESIRED. The choice of two types of fly ladders for our Giant Stride is offered at no difference in price. Please state choice. Fittings are finished to match frame pipe, i. e., galvanized or painted. When making additions or repairs, the finish should be specified.

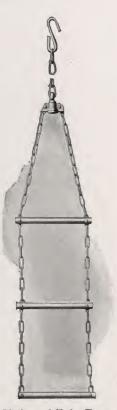


Ball Bearing Giant Stride Head

WO large self-contained ball bearings carry the revolving head and load, operating submerged in oil and encased and protected against dust, dirt and the Self-contained bearings maintain their alignments; disarrangement and lost balls are unknown. case contains less than a pint and is filled after head is mounted through screw plug hole in top. One filling a year This design follows best modern engineering is sufficient. Customer receives head completely assembled and ready to mount; all heads drilled for eight fly ladders; six, however, may be used. We recommend eight for greater capacity and better balance. Two types of fly ladders are offered at no difference in cost. See illustrations at right and left. Each type has its peculiar advantage. The chain and tube ring type, slightly heavier but much stronger is not so susceptible to vandalism, and is best for unpoliced playgrounds. Rope and wood rung type is less noisy; is lighter in weight and of a softer, more pliable nature; is less likely to cause injury. Please state choice when ordering. Either type is swung from the revolving head by heavy galvanized steel chain with swivel.



Rope and Wood Rung Fly Ladder



Chain and Tube Rung Fly Ladder





Ball Bearing Giant Stride

THIS incomparable device is a model we have manufactured in large quantities for many years and of the thousands in use not one has ever been reported as being unsatisfactory.

We offer this with the utmost assurance that it is the very best Giant Stride the market affords; one of the outstanding types of play apparatus, being looked upon as necessary to a modern playground.

The large, umbrella like head carries the chains and ladders out and away from the support column, creating less noise and preventing entanglements.

With this large ball bearing head, strong galvanized chains and well designed flying ladders, all support-

ed by a 4-inch steel pipe, a Giant Stride that is truly superior is our boast.

The space required for safe and satisfactory use should not be less than forty feet in diameter.

We suggest, as a means of keeping down noise created by the chains and ladders striking the pipe, that the hollow section be filled with sand.

Height over all, 14 feet; support pipe imbedded 4 feet in concrete.

Two workmen should make installation in five hours.

Pipe required—1 piece 4 inch (inside measure) 18 feet in length, standard.

No.	220-Code-LIYIZ -Head, base flange, top plug, and six ladders, either type (specify		1ha
No.	no pipe, weight about 221—Code-LIYJN —Head, base flange, top plug, and eight ladders, either type (s	specify	
	type), no pipe, weight about		
No.	222—Code-LIYNS —Ladders, either type, each	16	lbs.
No.	223—Code-LIYOB — Head only, weight about	60	lbs.
No.	224—Code-LIYUC —Galvanized pipe, 18 feet, 4-inch, weight	180	lbs.
	225—Code-LIYWA—Painted pipe, 18 feet, 4-inch, weight	180	lbs.



Ocean Wave Head

THIS is a development of our own. The entire moving load is carried on a hardened steel pin which is securely set in the hood.

This in turn finds a hemispherical bearing in the top pipe plug, which is made of chilled iron.

This plug is so shaped as to form an oil reservoir,

holding less than one pint. The oil completely covers the bearing.

To fill the oil reservoir remove the screw plug from the extreme top of head. One filling a season is all that is necessary.

This head will give the utmost service and satisfaction, because of its superior design.





Improved Ocean Wave

MANY new and unique features are incorporated in the makeup of this apparatus, all having been adopted after careful study.

The safety guard rail is so designed and placed that it is of greatest strength, adds rigidity to the ten support rods, also creates utmost handhold capacity, permitting greatest number of children to ride at a time.

This rail consists of ten short rigid hot galvanized steel pipes of 1 inch outside diameter.

The heavy steel "bumper ring" prevents the seat circle from striking the "center bumper" eliminating possible chance for injury to feet and legs. This "bumper ring" also enables children to ride facing the center with their feet resting upon the ring. The "Center bumper" is heavily clamped to the center support tube and prevents injury to both tube and "bumper ring" as well as keeping down the noise.

The seat circle, 2 feet above ground, is constructed of ten heavy wood segments, cut straight with grain. These are connected by heavy malleable iron fittings in a manner that permits of slight flexing. The load is thereby equalized on all support rods, each of which is attached at these points. Owing to the design of the seat board connection, it is possible for one man to assemble the outfit.

These features, with our improved head (illustrated on opposite page), together with best material and workmanship, make this really a superior piece of apparatus and one which is very popular.

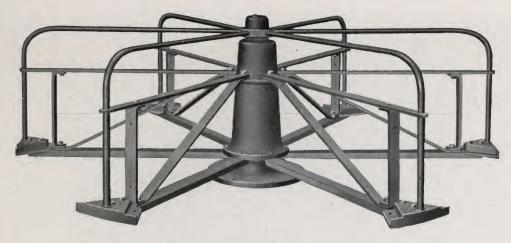
Capacity—forty children at a time.

Height over all, 12 feet; extreme diameter of seat circle, 12 feet, seat boards 2 inches thick, 8 inches wide; smoothly dressed and heavily painted.

Support tube, drawn steel, 5 inches inside measure, set 4 feet in concrete on base flange; painted with good quality paint. Some noise can be eliminated by filling tube with sand.

Ground space required for use—40 feet in diameter.

Two men should make installation in ten hours' time.



Supporting Structure

STANDARDIZED construction is followed, in that all parts are made interchangeable.

This is not only a manufacturing advantage but enables quick and easy assemblage on the

This is not only a manufacturing advantage but enables quick and easy assemblage on the playground, and insures perfect balance. Fewer parts are used than in any other make of merrygo-round. This structure is unusually heavy and well braced, being made of heavy steel bars, closely resembling steel bridge construction. The ball bearing hub is shipped completely assembled; likewise are the arms. It is only necessary to bolt these to the hub flanges; these in turn are covered with the wood segments and panels. Not a nail or wood screw is used, all bolts and machine cap screws.

Phantom View of Hub This hub alone weighs over 700 lbs.

The Ball Bearing Hub

This is very simple in design, being constructed of few parts. Bearings and lubrication have been given careful consideration.

The large machined steel shaft is securely shrunk into the revolving hub casing. This shaft, which acts as a pivot, is carried by two large, self-contained type, ball bearings. These in turn are supported within the oil case of the base casting. This is the best mechanical arrangement for this purpose known to the engineering world.

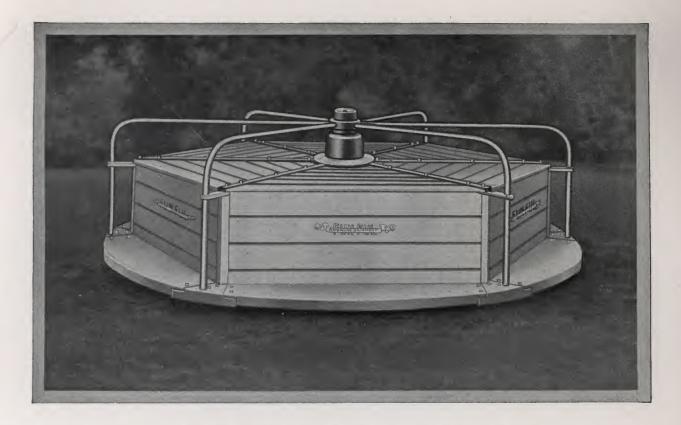
These bearings, operating under oil, will last indefinitely, and only require the oil level being maintained above the upper bearing.

Ordinarily, the case requires filling only once a season. Oftentimes these run for two or three years without refilling.

The larger size (No. 215) requires nine quarts of oil to fill the case; the small size (No. 216) requires one quart of oil. Any good brand of motor oil may be used.

The self-contained type ball bearings used here, as in all Fun-Ful Playground Equipment, eliminate all possible chance for lost balls or races, always maintain a certain amount of oil within themselves and always function properly. This type of bearing produces less friction and is ideal for the purpose; used exclusively by the Hill-Standard Co.





Ball Bearing Merry-Go-Round

(Two Sizes)

THESE attractive, easy running merry-gorounds are a delight to the children, and add greatly to the popularity of a playground; beautifully painted and decorated in bright colors. They be peak of happy children.

No. 215 has capacity of thirty-five children at a time.

No. 216 of eighteen small children.

Usually well built; will stand the roughest treatment and continue to run true, indefinitely with very little care and attention.

Supporting structure (see opposite page) made entirely of steel and iron, following best engineer-

ing practice; this metal entirely covered with heavy wood panels and segments, nicely fitted and held in place with bolts and steel studs.

This Merry-Go-Round is set on concrete base, level with top of ground. Anchor bolts and templet are furnished.

You can buy nothing better of its kind.

Two men should make installation in ten hours' time.

Both sizes are the same in design and construction.

Ground space required for safe use—No. 215, 20 feet in diameter. No. 216, 10 feet in diameter.

No. 215—Code–LIWOZ –	Packed knocked down for shipment, weight about	10 ft. 44 in.
No. 216—Code-LIWUB—	Packed knocked down for shipment, weight about Extreme outside diameter Height over all Handrails, galvanized steel pipe, diameter	5 ft. 22 in.

See Price List and Discount for Catalog No. 10





Cycle Stride

BEFORE this new and unusual piece of play apparatus appeared in our catalog, it had under-gone tests for almost two years, and we are glad to advise that it is now developed and improved to a point where it is consistent with the Fun-Ful line and, like all of our goods, it is guaranteed to be satisfactory.

Being unusually attractive, it will soon find a place on modern, up-to-date playgrounds throughout the country.

The large overhead wheel revolves on a slightly inclined axis, producing an undulating wavelike motion that is unusual, exciting and fascinating.

Substantially built of steel and malleable iron with the center support set 4 feet in concrete. It will provide a tremendous amount of downright fun and healthful exercise. It needs little attention.

Ladders of two types are furnished, i. e., rope with wood rungs, and chain with steel tube rungs. The choice is optional with the customer, at no difference in cost. Please state your choice when ordering.

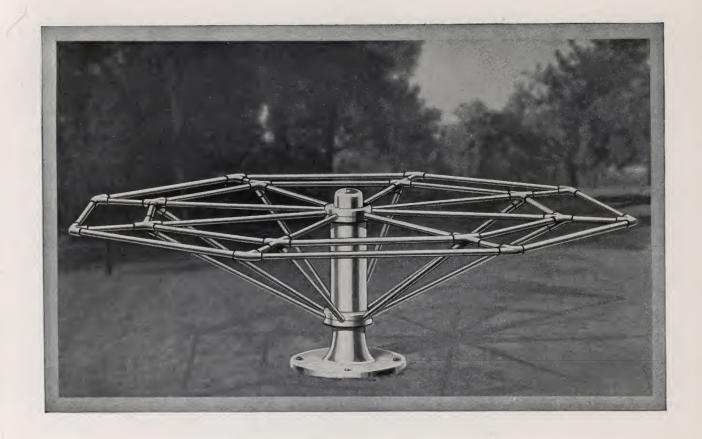
Height over all, 12 feet; extreme width, 10 feet; ground space required for safe operation, not less than 40 feet in diameter.

Capacity of eight youngsters at a time.

No. 227—Code-LIZAY—Complete with pipe, as shown, ready to install, shipping weight about.......580 lbs.

See Price List and Discount for Catalog No. 10





Revolving Parallel Bars

ONG ago, this type of apparatus was approved by park and playground authorities. Therefore, it is not offered new and untried. Its general character suggests gymnastic stunts with an added revolving or merry-go-round feature, worthy of any well patronized playground because of its great capacity, small ground space required and its ability to render most fun per minute.

It is very substantially made of steel and iron throughout, all bars and fittings heavily galvanized.

We have not overlooked the matter of lubrication. This apparatus revolves on large self-contained ball bearings, which operate submerged in oil. One filling of the oil cavity suffices for a season; easy to operate and is true running; set on flat, flush-with-surface concrete base with anchor bolts imbedded.

Extreme diameter from left to right, 12 feet; bars 42 inches above ground; bars 1½ inches outside diameter.

Space required for use, 16 feet in diameter.

Two men can make installation in four to five hours.

No. 262—Code-LODIK—Complete, packed for shipment, weight about.....

..700 lbs.

See Price List and Discount for Catalog No. 10



Fun-Ful Double Coaster

HERE we have illustrated one of our largest playground slides. It will accommodate one hundred children each with a "slide" per minute, without overcrowding; a real amusement device for the youngsters.

Chutes are 30 feet in length (two sections each), 19 inches inside width, 6 inches deep. These slides can be furnished with two wave chutes as illustrated, or with two straight chutes (retarding curve at lower end) or with one each. See catalog numbers below.

Customers are given choice of either hardwood or rust resisting metal bed ways, at no difference in cost, but we must insist upon the customer stating his choice when ordering; otherwise, we reserve the right to ship either type. This slide is fitted with all steel and iron double stairway, with three galvanized iron handrails securely fastened. The lower ends of risers are fitted with heavy iron anchors for imbedding in concrete.

Safety guard rail across chute exits, prevents children being pushed off the platform, and compels a sitting posture before going down the chutes;

the feature developed by us, and heartily approved by park and recreation authorities. All braces are of steel with carefully designed fittings and anchors for imbedding in concrete.



Slide is made of steel and iron except chute and floor of platform, these of hardwood. Outfit is heavily painted and varnished, except galvanized metal parts; inside and top of chute handrails and wood bedways are finished in natural color, filled, hand rubbed and varnished; a big first-class slide of large capacity—leading attraction to the playground.

Height over all, 16 feet; height of top platform, 14 feet; length of chutes, 30 feet.

Ground space required for use 30 feet by 50 feet.

37 480 0 4 777004 0 4 4 4 4		
No. 470—Code-LUGPA —Complete with two wave chutes as shown, weight about	2,060	1he
The state of the s	2,000	Ing.
No. 475—Code-LUHER—Complete with one wave and one straight chute, weight about	2,050	lhe
NI- 400 C 1 TITION C		
No. 480—Code-LUIJT —Complete with two straight chutes, weight about	2.065	1be



Calumet Coaster

THE coaster is the same as our No. 470 slide, with the exception of the stairway and handrails. The stairway on this model is constructed of hardwood, well fitted and bolted. It is of generous width and proportion, with two handrails and will accommodate a large number of children.

The cost of building a wood stairway is considerably less than building a steel stairway. Therefore, we are able to offer this outfit at a lower figure than our No. 470.

This, however, must not be regarded as a compromise as it is a big, first-class slide that will prove to be an attractive addition to any playground. We furnish either wave or straight chutes as indicated below. When ordering please state choice of chute bed way—hardwood or rust resisting metal; no

difference in cost. If no choice is stated, we reserve the right to ship either type.

We use the safety handrail on this also. It is not only a safety feature, but it adds very materially to the



strength of the handrail. The slide is the most popular of all playground apparatus and is the best investment, because of its large capacity of 120 "slides" per minute.

Five men should make complete installation in ten hours' time.

Ground space required for use, 30 feet by 50 feet. Height over all 16 feet; height of top platform, 14 feet; length of chutes, 30 feet.

No. 471—Code-LUGSO—Complete with two wave chutes as illustrated above, weight about......1,445 lbs. No. 472—Code-LUGUT—Complete with two straight chutes, with retarding curve, weight about...1,450 lbs. No. 473—Code-LUGVY—Complete with one straight and one wave chute, weight about............1,440 lbs.



New "Chicago" Slide

E build these for the Chicago South Park Commission and follow their specifications to the letter.

They have proven to be satisfactory under the most severe conditions, and have withstood terrific abuse for many years. We have obtained permission to manufacture and sell them to the trade.

All things considered, better value in a park slide has not as yet appeared on the market.

It has large capacity—as many as one hundred and twenty "slides" per minute with safety and no overcrowding.

Extra heavy hardwood construction throughout, well fitted and ironed.

You will notice that we have included the strong, safety guard rail; chutes furnished with either hardwood or rust resisting metal bed way at no

difference in cost. Mention your choice when ordering; this is important. These slides can be furnish-

ed with two straight chutes as illustrated, or if the customer prefers, one wave and one straight chute. See catalog numbers below.

Height over all, 10 feet, 4 inches; height of top platform, 8 feet.



Ground space required for use, 30 feet by 40 feet. Chute is 16 feet in length; in one section and is detachable; well painted with good weather-proof paint. This slide, like all Fun-Ful apparatus, is guaranteed to give the utmost service and satisfaction when properly installed.

Three men should make installation in eight hours' time.

No. 430—Code-LUBKA—With two straight chutes, as illustrated, weight	620 lbs.
No. 435—Code-LUCAL—With two wave chutes, weight	630 lbs.
No. 432—Code-LUBNO—With one straight and one wave chute, weight	





Fun-Ful Large Single Coaster

NUMBERS 450 and 455 are single chute slides with chutes 30 feet in length. Top platform 15 feet above the ground; a "thriller" and one of the leading sensations of the playground.

Ground space required for safe use, 13 feet by 40 feet.

No. 460, same design and construction, with 24 foot straight chute only, height of top platform 12 feet.

Ground space required for use, 15 feet by 30 feet.

Braces, handrails and stairs are of malleable iron and steel.

We call particular attention to the improved overhanging safety guard rail that compels a sitting position before going down the chute. This type has been approved by the leading park and recreation authorities. The chute, either wave or straight type, is in sections and demountable.

Chute sections are connected by an improved coupling and so designed that there are no side projections; no danger of injury to children's hands; a recent improvement and is far superior to the ordinary construction; choice of either hardwood or Armco galvanized iron chute bed way, at no difference in cost. We insist upon customer's stating his choice when ordering; otherwise, we reserve the right to ship either type.

The chutes used on all Fun-Ful slides are hand finished with great care.

All numbers here mentioned have a capacity of 60 "slides" per minute.

Three workmen should assemble and install ready for use any one of these slides in four hours' time.

See Price List and Discount for Catalog No. 10



Fun-Ful Special Slide

(Portable)

THIS is one of our most popular slides, particularly with schools. It is made mostly of hardwood.

This slide is furnished with safety guard rail, at a slight additional cost over the conventional type.

The safety guard rail is best, and is recommended by most playground authorities; chute furnished with hardwood or rust resisting metal bed way at no difference in cost. Please state your choice.



Stairway is made of hardwood, well braced, fitted and bolted, insuring best construction and long life.

Stair treads, $7\frac{1}{2}$ inches by 19 inches, of 1 inch clear stock; risers, 1 inch by 8 inches. The chute is demountable, a great convenience when moving.

This slide, like all Fun-Ful goods, is guaranteed to give the best service and satisfaction. It is the best value we know of.

Well painted with good weather-proof paint, inside of chute in natural color; handrails galvanized. It will add to the attractiveness of any playground.

Height over all, 10 feet; height of platform, 8 feet; chute length (one section), 16 feet.

Ground space required for use—15 feet by 25 feet. Capacity, 60 "slides" per minute.

Two workmen should assemble any one of these in one hour's time.

No. 410—Code-LOYZK—Complete, as shown, weight	lbs.
No. 415—Code-LOZHO—Complete, with wave chute, weight 425 l	lbs.
No. 420—Code-LOZYK—With ordinary handrails and straight chute, weight about417 l	lbs.
No. 425—Code-LUARB—With ordinary handrails and wave chute, weight about420 1	lbs.

See Price List and Discount for Catalog No. 10





Fun-Ful Coaster

(Portable)

E boast of this as being the best medium sized slide on the market; adopted as standard slide equipment by a large majority of our greater cities for their playgrounds; all steel and galvanized malleable iron, except the chute bed way of either hardwood or Armco galvanized iron; furnished at no difference in cost. Please state choice when ordering, otherwise, we reserve the right to ship type which is convenient.

The demountable chute makes the Slide easily portable, a desirable feature when moving.

The overhanging safety guard rail prevents youngsters from being pushed off the platform and compels a sitting posture before going down the chute. A first-class slide in every respect that will give many years of satisfactory service.

Numbers 440 and 445 are 10 feet in height over all; top platform 8 feet above the ground; chutes 16 feet in length. Ground space required for use, 15 feet by 25 feet.

Numbers 446 and 447 are 12 feet high over all; top platform 10 feet above ground; chutes 20 feet long. Ground space required for use, 15 feet by 30 feet.

All numbers here mentioned have a capacity of 60 "slides" per minute.

Two workmen should assemble any one of these in two hours' time.

No. 440—Code-LUCRY —Complete, with wave chute, weight about	lbs.
No. 445—Code-LUDMA—Complete, as shown, with straight chute, weight about	lbs.
No. 446—Code-LUDNE—Complete, with 20 foot straight chute, weight about	lbs.
No. 447—Code-LUDSY —Complete, with 20 foot wave chute, weight about	lbs.



Cellar Door Slide

Here we offer something very new—just offered to the trade. It will be copied by others because of its superior features.



For lack of a better name, and, because it so quickly reminds the older people of the old-fashioned cellar door at the back of the house, whose inclined surface provided the original slide for children, we are pleased to call this popular piece of apparatus the Cellar Door Slide.

This slide that we have built is nothing more than an improvement, offering a somewhat greater thrill, and accommodating a greater number of children.

The leading feature of the Cellar Door Slide is its tremendous capacity. It has been placed at the disposal of three hundred children, including those of the first to sixth grades —no other apparatus on the ground, with instructions to use the slide as



fast as each child possibly could. It was impossible to choke the chute, or to cause interruption in the stream of little human beings that poured over the platform and down the broad chute. It will accommodate a mob without danger.

When the capacity, cost and the amount of fun provided are compared with other apparatus, it will be plainly seen that the cost per child is very low.

The Cellar Door Slide has been thoroughly tested for several seasons. It was the most satisfactory demonstration ever witnessed by those who are familiar with the requirements of playground equipment.







Cellar Door Slide

HE Cellar Door Slide is very sturdy in construction. It is not a toy, being made of heavy angle iron and hardwood timbers, weighing in all about 3,565 pounds.

The factor of safety is beyond question.

We regard this as the best investment that can be made in the nature of play apparatus, where a great number of children are to be provided for.

This slide will last indefinitely if given ordinary care. It may be left on the playground throughout the year.

The platform is mounted by means of a ramp instead of stairs. The ramp, with heavy crosswise cleats, measures 10 feet in width by 14 feet in length, rising 6 feet to the top platform.

The top platform measures 3 feet by 6 feet.

Chute is 12 feet in length, 10 feet in width. It is covered with rust resisting metal, and made in sections for convenience in shipping and assemblage.

Level ground space required, 20 feet by 40 feet. This outfit is well painted for weather protection, and should be painted not less than every two years. Truly, this is an unique piece of playground apparatus of simple design, and should be on every playground.

Capacity of 150 "Slides" and more per minute. Four men should make installation in six hours' time.



New All-Steel Spiral Slide

POR some time there has been an increasing demand for a Spiral Playground Slide, Because of the very high cost of manufacture, few playgrounds could afford these novel slides. It remained for this company to develop an allmetal spiral slide that could be produced and sold at a reasonable price.

We are the only manufactures of an all metal spiral slide.

This spiral slide is unique in many ways and is very popular with the youngsters.

It may be installed in considerably less space than any other type of slide, with equal chute length and capacity. The ground space required is only 20 by 35 feet. May be installed close to a wall or building, or in that corner of the

playground that will not accommodate any other type of play apparatus.

This slide stands 18 feet above the ground. It is painted in bright colors, with decorations to match; with its bright galvanized bed way, it is a thing any playground committee is proud to behold.

The chute measures in its spiral descent, over 35 feet in length and of a pitch that prevents a dangerous speed.

The guard rim is unusually high, preventing possible chance for children to fall off the chute, regardless of the crowd; the safest slide we know of.

There are no rivets, bolts, screws or raw edged metal exposed to cause injury.

The bed way is constructed of many Armco galvanized iron sheets, overlapping very much the same as shingles on a roof, or better still, like the scales of a fish.

Of the many spiral slides of our make now in use, not an injury of any kind has ever been reported. These are shipped completely assembled, except the metal stairs and brace pipes, which can be attached in a short time by means of bolts.

The center column, stairs and braces are provided with anchors for imbedding in concrete; installation drawings furnished.

In view of its large capacity, attractive appearance and small space required, it adds greatly to a recreation center, and it is enjoyed as much by the "grown ups" as by the children; capacity of 60 "Slides" per minute.

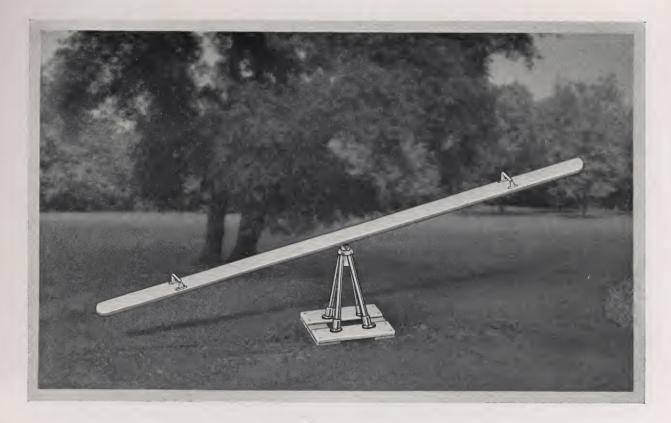
Six men should be able to make complete installation in four hours, or less.





Page Twenty-three





Single Seesaw

(Portable)

THIS is a full size Seesaw Board, the same dimensions as the large four board set, our No. 230 and No. 233, shown on other pages.

We have mounted this on a very substantial portable base. This type is very popular with park men, because they can be readily moved and taken in for the winter. They are self-contained, therefore, there is no likelihood of lost parts.

Because of their being self-contained and portable,

they are conveniently moved from place to place as the sod begins to show wear.

Ideal for home use, indoors or out. Some park authorities prefer a number of these in preference to the larger multiple sets. These are good value, strong and durable. You will make no mistake in buying them.

Can be assembled by one man in 30 minutes.

Ground space required for use—6 feet by 20 feet.

Small Single Seesaw

THIS is a small single-board, portable outfit made especially for the little tots two to five years of age. It is used by many kindergartens and on private lawns, and frequently in the playrooms of homes.

The board is of suitable wood, 1 inch thick, 8 inches wide, 8 feet long, with rounded edges, and is reinforced in the center. This is mounted

on a wood base of ample dimensions to prevent toppling over.

The No. 239 outfit is a simple affair, but it is well designed for the purpose, and will withstand the usual abuse of youngsters of these ages.

Nicely finished and painted; we are sure you will be well pleased.

One style and size only.





Steelflex Seesaw

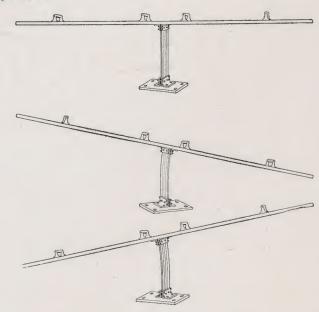
(Patent Applied For)

A RADICAL departure from the old style; simplified and improved without increase in cost; vertical, flat steel spring leaves firmly fastened at center of the board and base; a quick acting, safe rocking action is obtained with less effort. One, two, three or four children may enjoy the board at a time; the only type of Seesaw that may be used by one youngster without the aid of a partner.

Mounted on concrete base, set flush, with ground level; a self-contained unit that may be installed in batteries of two, three, four or more in a row. Innumerable stunts which children enjoy may be performed upon this.

A recent development, which bids fair to supplant all other styles and types of Seesaws; guaranteed to be entirely satisfactory; installed complete, by one man in three hours' time. Ground space required, 6 by 16 feet.

Board—2 inches by 12 inches by 14 feet, selected clear stock; four galvanized iron handles.

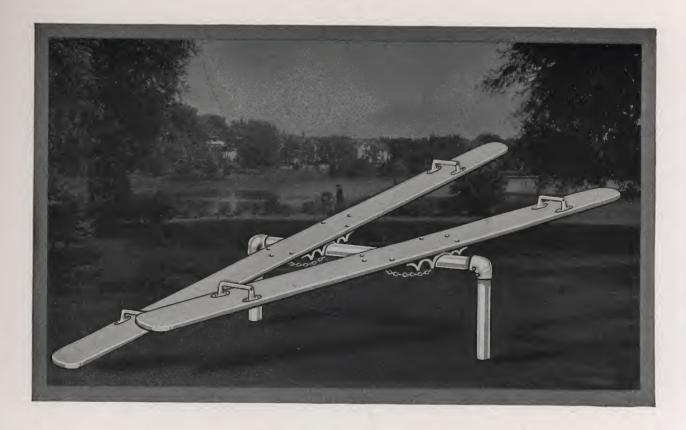


No. 241—Code-LOAVZ—Complete as shown, weight about

.110 lbs.

See Price List and Discount for Catalog No. 10





Two-Board Seesaw Outfit

A VERY simple piece of play apparatus, but made of best materials and well designed. This is of the same general design and construction as our No. 230 except that two boards are used instead of four.

The boards are especially selected for this purpose, being long, flexible, clear of knots, sap vein or blemish of any kind.

Boards 2 inches thick, 14 feet long, 12 inches wide, planed smooth and with rounded edges and well painted to prevent weather action.

Grips are of one piece heavy malleable iron, well galvanized, and held in position on the boards by four bolts each.

Malleable notched fulcrum irons, two each, bolted underneath at the center of each board, makes possible quick and satisfactory adjustment. One iron collar on cross frame between each fulcrum iron prevents boards from losing their position on frame.

A chain is provided and draped under each board and through frame, preventing removal of board.

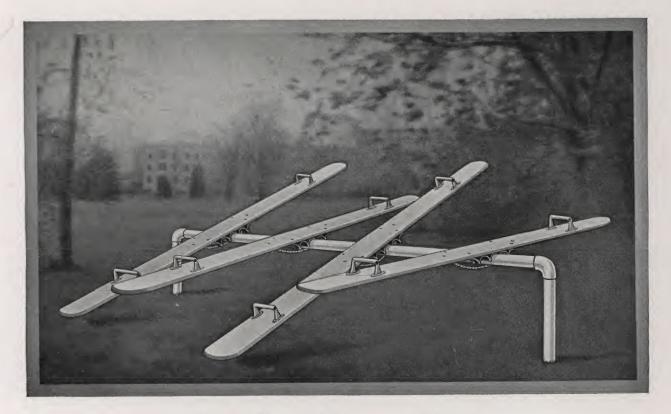
The vertical supports and cross member are of standard 3 inch steel pipe and has proven to be of ample strength to support with a large factor of safety as many children or adults that can find room on the boards.

Ground Space required for use, 13 feet by 20 feet. One man should make complete installation in four hours' time, or less.

Frame uprights imbedded 2 feet 6 inches in concrete with base flanges. Pipe required—2 pieces 3 inch pipe 5 feet long; 1 piece 3 inch pipe 8 feet long.

See Price List and Discount for Catalog No. 10





Four Board Seesaw Outfit

Paratus.

EITHER history nor tradition gives us the origin of this form of amusement and exercise. It is an ancient invention, yet it is one of the most popular types of play apparatus.

These boards are long and flexible, of selected clear lumber, planed smoothly, with edges rounded; boards, 2 inches thick, 14 feet long, 12 inches wide, heavily painted; grips, one piece heavy malleable galvanized iron, bolted through boards, with nuts underneath.

Malleable notched fulcrum irons are bolted to under sides of boards for adjustment, and iron collars on frame to keep boards in a relative position. A chain is provided to prevent removal of boards; Ground space required for use 20 feet by 25 feet.

Frame uprights imbedded $2\frac{1}{2}$ feet in concrete. Base flange anchors are furnished. One man should make complete installation in five hours.

Pipe required—1 piece 3-inch pipe, 15 feet long; two pieces 3-inch pipe, 5 feet long.

No. 230—Code-LIZIB —Boards and all fittings, complete except frame pipe, weight about	400 lbs.	
No. 231—Code-LIZOC —Galvanized frame pipe cut to length, weight about	190 lbs.	
No. 232—Code-LIZUD—Painted frame pipe cut to length, weight about	190 lbs.	

Single Stationary Seesaw

OCCASION demands, at times, the use of Single Seesaw Boards and for such we recommend our No. 237.

For this, we furnish a single board of the same dimensions, grips and finish as the No. 230, as illustrated above. This single board is supported by one vertical tube $4\frac{1}{2}$ inches in diameter, 4 feet in length, imbedded 2 feet in concrete

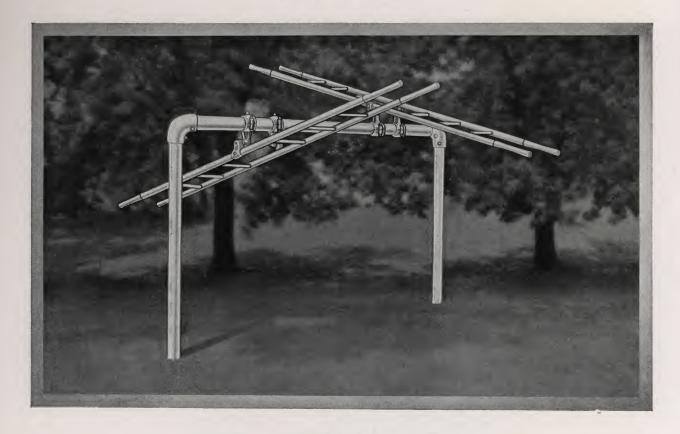
with base flange anchor, heavy fulcrum irons under and connecting with upper end of tube. This board is not adjustable or demountable.

Ground space required, 6 feet by 20 feet. This is a very substantial arrangement and will give the utmost service; furnished in one size and style only. One man should make installation in two hours' time.

No. 237—Code-LOLAP— Complete with tube, everything ready to install, weight about......125 lbs.

See Price List and Discount for Catalog No. 10





Teeter Ladder Outfit

POR the generation of athletic youngsters, we have provided this Teeter Ladder outfit.
All sorts of stunts, too numerous to mention, may be performed on this apparatus.

The factor of safety has been well taken care of. Adults may use them without fear of their breaking.

The ladder trunnions may be set one above and one below the horizontal frame member, as illustrated. This makes it possible for youngsters of different ages to use it conveniently. The difference in the heights of the two ladders, when set in this way, is approximately 1 foot.

The ladders, like the rest of the apparatus (except

the grips), are made of steel with tubular rungs. We use no bolts or rivets, which might cause injury and tear clothing.

The hand grips on ladder ends are of selected hardwood, nicely turned, fitted and varnished.

Every outdoor gymnasium should have one or more for the use of its patrons.

Length of frame, $9\frac{1}{2}$ feet; height, 5 feet; length of ladders overall, 10 feet.

Space required for use—15 feet by 20 feet.

Two men should make installation in less than five hours.

Pipe required—2 pieces standard 3-inch, 8 feet long; 1 piece 3-inch, 9 feet long.

No. 326—Code-LOMTO —Apparatus and all fittings, no pipe, weight about	lbs.
No. 327—Code-LOMUV —Galvanized pipe, weight about	lbs.
No. 328—Code–LOMWY—Painted pipe, weight about	lbs.
	lbs.





Horizontal Ladder

A PLAYGROUND or outdoor gymnasium is not complete without one or more horizontal ladders.

The monkey instinct, or wild desire on the part of children to climb, is gratified by the installation of this apparatus.

A few minutes' exercise each day on this equipment would be beneficial to anyone.

The horizontal ladder is particularly adapted for the purpose of developing chest, back and abdominal muscles. The children, of course, resort to all sorts of stunts, and we find this to be one of the most popular pieces.

It is simple in design and construction, and re-

quires little space with no upkeep; made entirely of galvanized steel, no bolts or screw heads to cause injury.

This outfit is of ample strength to support safely all the children who can possibly find room on the apparatus.

The upright supports and span members are $2\frac{1}{2}$ inches in diameter, the rungs slightly over 1 inch. Lower support ends are imbedded in $2\frac{1}{2}$ feet of concrete. Base flange anchors are furnished.

Height over all, $7\frac{1}{2}$ feet; length over all, 16 feet; width, 18 inches.

Ground space required for use—6 feet by 20 feet. Shipped in three sections.

Two men should make installation in five hours.

See Price List and Discount for Catalog No. 10



Circular Traveling Ring Outfit

"Revolving Wheel"

HERE we offer something comparatively new for the playground. It was brought upon the market only a season or two ago, and is proving unusually popular.

The Circular Traveling Ring is irresistible.

Even adults, with reluctance, restrain from trying a trip around its circuit. Not only is this popular with the kiddies, but it adds much to the attractiveness of the playground.

Truly a well-designed piece of apparatus, that is fast becoming necessary to complete the modern up-to-date playground. Owing to its design and construction, it permits a full quota of traveling rings to be adequately supported by only one vertical support pipe.

Not only does this make for economy in construction cost, but it proves quite a saving of installation expense, and considerably less ground space is required for its use. The results obtained are exactly the same as when using the conventional type of traveling rings, supported in one straight line, such as our No. 301. In fact, there is a certain fascination for the youngsters in traversing this circular path. It may also be used as a flying ring outfit, accommodating four youngsters at a time, with ample room and utmost safety.

Please bear in mind that the overhead "wheel" revolves, being nothing more than a revolving "wheel" frame for the purpose of supporting the rings. It is very simple in design and construction only the best of materials being used in its makeup; entirely of steel and malleable iron.

The overhead "wheel" spindle is securely clamped to the vertical support pipe and by this method, a strong support for the rings is formed. The rings are of steel tubing, galvanized, and are swung four feet apart by extra heavy machine-made chains, which also are galvanized and provided with swivels. These swivels are placed in all single chain "Fun-Ful" apparatus. This is done for the purpose of preventing vandals and destructive youngsters from placing sticks in the rings and twisting the chains to destruction.

Height of the No. 295 Circular Traveling Ring Outfit, above ground, 12 feet. Diameter of the "wheel" 10 feet, rings supported 6 feet above ground. Should not be operated on circular ground space less than 30 feet in diameter.

Two workmen should make installation in ten hours' time.

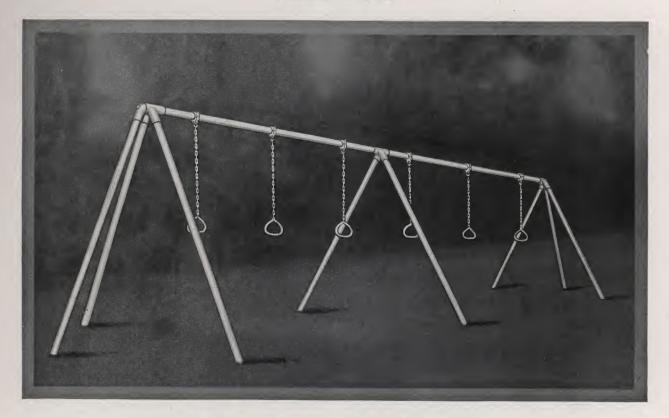
Pipe required—1 piece, 4-inch standard, 16 feet long.

No. 295—Code-LOHOP—All apparatus and fittings, no pipe, weight about	380 lbs	s.
No. 296—Code-LOHPO—Galvanized support pipe, cut to length, weight about	160 lbs	s.
No. 297—Code-LOHYR—Painted support pipe, cut to length, weight about	160 lbs	s.

See Price List and Discount for Catalog No. 10



No. 295



Traveling Ring Outfit

THERE is "oodles" of fun and healthful exercise to be derived from the use of this traveling ring outfit. It is almost as popular with the grown-ups as with the children.

The rings, regularly, are of steel tubing, but if desired, cast aluminum rings will be furnished at slight additional cost. The rings are supported by heavy steel chains with swivels, which, in turn, are hung to ball bearing hangers, clamped to overhead frame member. These parts are galvanized. All overhead fittings are made of the best quality malleable iron, and of generous proportions in order that there may be no possible chance for breakage.

The frame pipe used is considerably heavier than need be for the actual load and service expected, but its safety is beyond question. In many cases, because of expense, there has been a tendency to construct these frames with only six slanting supports. We have found these to be not only a vibrating, unsatisfactory affair, but unsafe, and we do not recommend a construction using fewer than eight 2-inch standard pipe supports in connection with 3-inch over-head pipe member, as shown.

This outfit is first-class and of best quality. You can buy no better.

Ground space required for use—20 feet by 60 feet.

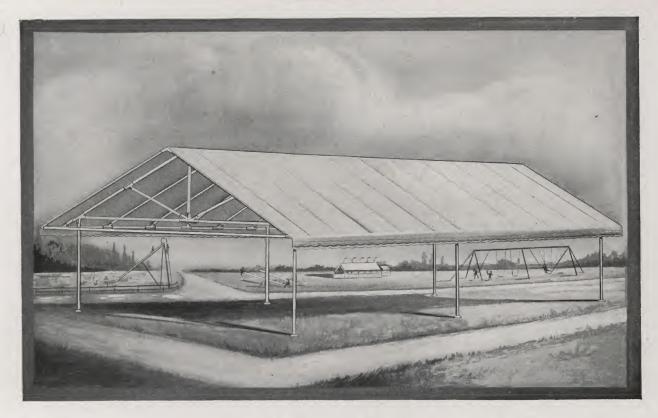
Height over all, 14 feet; length over all, 44 feet; ground space required, 14 feet by 44 feet; frame set in concrete; base flange anchors furnished.

Four workmen should make installation in sixteen hours' time or less.

Pipe required—2 pieces, 3-inch, each 20 feet long; 8 pieces, 2-inch, each 17 feet long.

No. 301—Code-LOJAM—All apparatus and fittings, steel tube rings, no pipe, weight about165	ilbs.
No. 302—Code-LOJEN—All apparatus and fittings, aluminum rings, no pipe, weight about	ilbs.
No. 303—Code-LOJIP —Galvanized pipe, cut to lengths, weight about	lbs.
No. 304—Code-LOJMA—Painted pipe, cut to lengths, weight about	lbs.

See Price List and Discount for Catalog No. 10



Shelter Shed

PRIMARILY designed for public playgrounds, yet many other uses have been found, such as—sun and shower protection at country clubs, beaches, fairs, religious meetings and outdoor gathering places.

The frame is assembled and permanently set in concrete. We furnish only the fittings and pipe; all fittings best quality galvanized malleable iron; all pipe galvanized; canvas top and side walls obtained from other sources by the customer. This is a very strong, substantial frame and will satisfactorily serve its purpose for many years.

As playground shelter sheds, they are ideal as both

shower and sun protectors for the smaller children. Vocational classes, small apparatus, park benches, sand boxes, etc., are advantageously sheltered in this way.

Extreme height, 14 feet; from eaves to ground, 7 feet, 6 inches; extreme width 21 feet, 3 inches; length over all, 34 feet; distance, center to center of supports lengthwise, 15 feet; distance, center to center of supports crosswise, 17 feet; supports imbedded in concrete, 3 feet, 6 inches; ground space required 714 square feet. Four workmen can assemble and install the frame complete, in one day's time.

PIPE SPECIFICATIONS

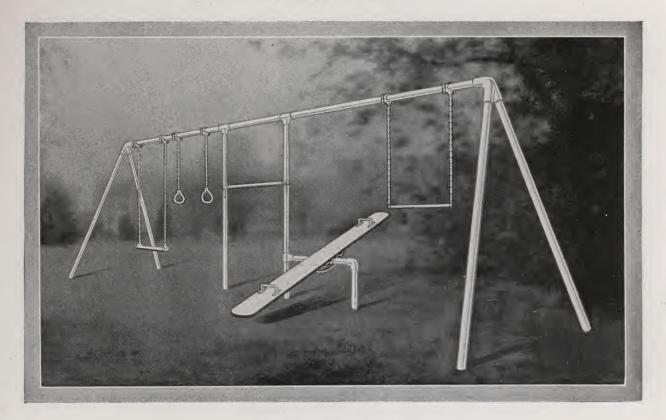
2 Pieces—1½"	201 4"	Threaded both ends
6 Dieces—11/4"	11' 934"	Threaded both ends
2 Picces 1/2	4' 634"	Threaded both ends
5 Pieces 11/1	4' 458"	Threaded both ends
0 Pieces—1/2	161 4	Threaded both ends
3 Pieces—1½"	16! 4"	Dloin ende
6 Pieces—1½"	12' 31/4"	Fiam chus
c 72' +1/II		2 Pcs. threaded both ends
b Pieces—1½"	10 10	4 Pcs. threaded one end
16 Pieces—1"	11' 11½"	Threaded both ends
4 Pieces—1"	11' 9¾"	Plain ends
T 110005 1	-1 /4	
No 2500 Code M	MICZO-Fittings, base flanges, everything except pipe, weight	the about 850 lbs
140. 2500—Code—IVI	IICZO-Fittings, base manges, everything except pipe, wen	5110 00000

See Price List and Discount for Catalog No. 10









Combination Set

A GOOD medium size gym and play outfit that is well suited for an estate in the country or a small community play lot. Country Clubs are also finding good use for them. Because of the nature of the apparatus here illustrated, it is possible to construct the frame entirely of 2-inch standard steel pipe except seesaw support which is 3 inch. Quite a saving in cost is thus possible, and ample strength assured. All apparatus is of standard approved public playground design and specifications—nothing better on the market.

Fittings and parts are of best quality malleable iron and are heavier than ordinarily used.

Swing with ball bearing hangers, special long link chains of 25,000 pounds tensile strength; solid

cold-rolled steel trapeze, bars $1\frac{1}{8}$ inches and smooth; a seesaw full 12 inches wide and 14 feet in length of 2-inch clear Oregon Fir; a pair of steel tube rings and steel bar trapeze comprises a most substantial outfit that will withstand no end of strenuous use on the part of youngsters and adults.

Height over all, 10 feet; length over all, 30 feet, width over all, 14 feet. Frame set in concrete.

Ground space required for safe use, 16 feet by 30 feet.

May be installed by one man in eight hours' time.

Pipe required—1 piece 2-inch, 20 feet long; 4 pieces 2-inch, 10 feet 6 inches long; 2 pieces 2-inch, 10 feet long, drilled for bar adjustment; 1 piece 3-inch, 5 feet long; 1 piece 3-inch, 3 feet long.

No.	364—Code—LOSWA—All apparatus and fittings, no pipe, weight about	.225 lbs.
No.	365—Code—LOSYE —Galvanized pipe only, cut to lengths, weight about	375 lbs.
No.	366—Code—LOTAY—Painted pipe only, cut to lengths, weight about	375 lbs.





Outdoor Gymnasium

THIS gymnasium has been a favorite for many years. Therefore, it is time-tried and proven.

Has capacity of eight children at a time using swings singly.

A very substantial frame supports the various pieces of apparatus, the overhead member being 3-inch standard steel pipe with vertical and angling supports of 2-inch steel pipe. These are connected by heavy malleable iron fittings of approved type which make a sturdy, rigid and safe frame.

Iron base flanges are provided for all braces and supports; these act as anchors and are imbedded in concrete.

The swings, rings and trapeze are all fitted with ball bearing hangers; horizontal bars are adjustable, and anchors are furnished for lower end of steel climbing pole and flexible ladder; these also are imbedded in concrete.

Supplied with either galvanized or painted pipe and fittings. Don't forget to specify your choice when ordering, and use catalog numbers to avoid mistakes.

Height over all, 14 feet; length over all, 56 feet; ground space required for apparatus, 25 feet by 60 feet.

Five men should make complete installation in twenty-five hours' time or less.

Pipe required—2 pieces 3-inch, 15 feet long; 1 piece 3-inch, 12 feet long; 10 pieces 2-inch, 17 feet long; 3 pieces 2-inch, 16 feet long.

Fittings required—2 pieces No. 157, 3-way end spread; 2 pieces No. 156 3-way center spread; 1 piece No. 153 3 x 2 tee; 13 pieces No. 171 base flanges.

335 lbs.
,075 lbs.
075 lbe

See Price List and Discount for Catalog No. 10



Outdoor Gymnasium

IN THIS we offer an outdoor gymnasium with unusually large capacity. The apparatus is well arranged as to safety, capacity and minimum frame work.

Capacity of nine children at a time, 90 "slides" per minute on slide and parallel sliding poles.

The flying rings (steel tube) and trapeze are entirely of steel and are supported by our high-grade ball bearing hangers, which are superior to the roller bearing. This apparatus is made entirely of steel and malleable iron, except the chute side rails, which are of hardwood, and hand finished.

The coaster chute is of the same general design and construction as our No. 450 slide. Chute bed way can be furnished for either hardwood or of rust resisting metal. This is optional with customer, at no difference in cost. Therefore, please state your wishes when ordering; otherwise, we reserve the right to ship either type.

Sliding poles, guard rails and ladder, climbing poles, flexible ladders, slide stairway, trapeze rings and bars are all galvanized. Frame pipe is either galvanized or painted (see below).

Height over all, not including top guard rails, 14 feet; length over all, 45 feet; ground space required, 30 feet by 50 feet.

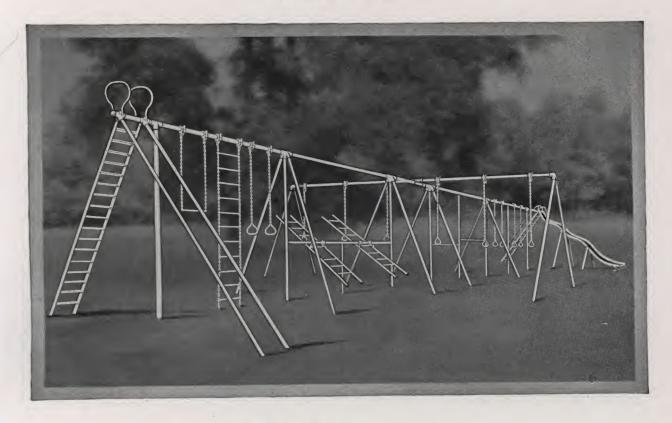
Five men should make complete installation in thirty hours.

Pipe required—2 pieces 3-inch, 17 feet long; 2 pieces 2-inch, 16 feet long; 3 pieces 3-inch, 15 feet long; 4 pieces 2-inch, 17 feet long.

Frame fittings required—2 pieces No. 152; 1 piece No. 153; 1 piece No. 156; 1 piece No. 155; 2 pieces No. 173; 6 pieces No. 171; 2 pieces No. 237, finish plugs.

No. 380—Code-LOVBE —All apparatus and fittings, no pipe, weight about1	,500	lbs.
No. 381—Code-LOVDO—Galvanized pipe, weight about	800	lbs.
No. 382—Code-LOVEB—Painted pipe, weight about	800	lbs.





Large Outdoor Gymnasium

HERE we have illustrated our largest stock outdoor gymnasium. There is no limit to size, arrangement or amount of apparatus that may be incorporated in one of these outfits. Should you wish a special design, please consult us.

No. 385 is so arranged and constructed that it offers the greatest variety and capacity expected of one combination. In addition to the ordinary arrangement of supporting all of the apparatus in one line, we have included a cross frame for the support of a full size six traveling ring outfit. All rings and trapeze are supported by our improved type ball bearing hangers, which are very durable and practically noiseless.

This outfit is made entirely of steel and malleable iron, except the chute side rails and the teeter ladder grips, which are of hardwood. All rings, chains, bars, trapeze, guard rails, sliding poles and flexible ladder are galvanized. Chute is 30 feet long and of same design and construction as our No. 450 coaster slide. The chute bed way is furnished in either hardwood or rust resisting metal.

Please state your choice when ordering; no difference in cost.

Height over all, not including top guard rails, 14 feet; length over all, 50 feet; width, 40 feet; ground space required, 50 feet by 70 feet.

Capacity other than slide, slide poles and traveling rings, eleven youngsters at a time; slide, slide poles and traveling rings one hundred ten per minute.

Pipe required—2 pieces 3-inch, 17 feet long; 1 piece 3-inch, 18 feet long; 2 pieces 3-inch, 20 feet long; 1 piece 3-inch, 12 feet long; 2 pieces 3-inch, 15 feet long; 12 pieces 2-inch, 17 feet long; 5 pieces 2-inch, 16 feet long; 1 piece 2-inch, 10 feet long; 1 piece 2-inch, 8 feet long.

Frame fittings required—2 pieces No. 152; 1 piece No. 158; 18 pieces No. 171; 2 pieces No. 164; 3 pieces No. 154; 2 pieces No. 173; 4 pieces No. 156; 2 pieces No. 237; 1 piece No. 153.

Five workmen should be able to make installation complete with a total of fifty hours' work.

No. 385—Code-LOVOD—All apparatus and fittings, no pipe, weight about	2,000 lbs.
No. 386—Code-LOVUF—Galvanized pipe, cut to lengths, weight about	2,000 lbs.
No. 387—Code—LOVVG—Painted nine cut to lengths weight about	2 000 1bs





Triplex Combination

THIS combination was suggested by the Iowa State school authorities, and, as it has proven to be so satisfactory and popular, it deserves space in our catalog. Owing to the nature of the apparatus, it is possible to construct the frame entirely of 2-inch standard steel pipe and still maintain the desired rigidity. It is obsolutely safe under the most strenuous use, and it is moderately priced.

For those who are fortunate in having lawn space, this will provide an excellent outdoor gym that may be enjoyed and it will prove to be a benefit to all members of the family. The bar is solid, cold rolled steel, galvanized, $1\frac{1}{8}$ inches in diameter, 6 feet in length (our standard approved bar), adjustable to any desired height by means of substantial malleable iron clamps.

Height over all, 10 feet; length over all, 25 feet; width over all, 12 feet; set in concrete.

Space required for use, 25 feet by 30 feet.

Two men can make installation in five hours' time.

Pipe Required—1 piece 2-inch, 15 feet long; 4 peices 2-inch, 13 feet long; 2 peices 2-inch. 12 feet long, drilled for bar.

No. 367—Code-LOTEZ—All apparatus and fittings, no pipe, weight about	lbs.
No. 368—Code-LOTIB —Galvanized pipe, cut to lengths, weight about	lbs.
No. 369—Code-LOTOC—Painted pipe, cut to lengths, weight about	lbs.

See Price List and Discount for Catalog No. 10





Duplex Combination

A VERY popular play station for the boys and girls.

Owing to the design of this combination, it is possible to construct it with a minimum amount of frame pipe, hence the low cost.

The frame is entirely of 3-inch standard steel pipe. The slide stairways follow our standard construction, having malleable iron steps, steel tube risers, with galvanized steel guard rails. The lower ends of these stairs are provided with anchors for imbedding in concrete.

The chutes can be furnished with either hardwood or rust resisting metal bed ways at no difference in cost. We ask that customer please state his choice.

Swings are supported by ball bearing swing hangers—the best swing hangers ever devised. Swing chains are of the approved long link type used in connection with our new style swing stirrup and hardwood seat board.

Seesaw boards and fittings are the same as used on our large four-board outfit No. 230; all fittings best quality malleable iron, approved design. This outfit is set in concrete; base flanges furnished which act as anchors.

This combination is a very good value and is guaranteed to give the best service and satisfaction.

Capacity, eight children at a time, plus 120 "slides" per minute on the two chutes.

Height over all, 10 feet; height slide top platforms, 8 feet; chute, 16 feet long; length of swing frame proper, 16 feet; length of apparatus over all, 28 feet; ground space required, 30 feet by 35 feet.

Three men should make installation in fifteen hours' time.

Pipe required—1 piece 3-inch, 16 feet long; 2 pieces 3-inch, 13 feet long; 2 pieces 3-inch, 10 feet long; 4 pieces 3-inch, 3 feet long; 2 pieces 3-inch, 5 feet long.

No.	. 389—Code-LOWAB—All apparatus and fittings with straight chutes, as illustrated, no pipe,		
	shipping weight about	,200	lbs.
No	. 390—Code-LOWBA—Same as No. 389, except with wave chutes, no pipe, shipping weight		
	about1	,225	lbs.
No.	. 391—Code-LOWEC—Galvanized pipe, cut to lengths, weight about	650	lbs.
No.	392—Code-LOWFO—Painted pipe, cut to lengths, weight about	650	lbs.



School Combination

A N OUTFIT particularly well designed for small institutions and playgrounds. It combines such a wide assortment of apparatus for so little amount of frame pipe. As a result, it is moderate in price and a very good value.

This outfit is set in concrete, well braced with pipe of ample strength, connected by heavy malleable iron fittings, making a frame of extraordinary strength and rigidity. Chute is 20 feet in length and furnished with either hardwood or rust resisting metal bed way. The choice is optional with customer, at no difference in cost. Please state your wishes when ordering.

Trapeze, rings, flexible ladder, swing, bar and seesaw are all standard approved apparatus, the same as used on our larger gymnasium combination outfits. Slide stairway is steel and malleable iron, with galvanized steel handrail; ball bearing hangers used with trapeze rings and swing. Horizontal bar is solid cold-rolled steel, plated and polished, ad-

justable as to height; seesaw board dressed smoothly, with rounded edges, made from select stock, 2 inches thick, 12 inches wide, 14 feet long and well painted; fitted with adjusting fulcrum irons under boards; pipe collar maintains position of board on frame; malleable iron grips galvanized and well bolted.

Capacity, seven children at a time, plus 60 "slides" per minute.

Height over all, 10 feet; length over all, 29 feet; ground space required, 30 feet by 40 feet.

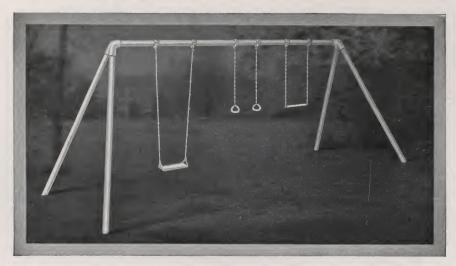
Two men should be able to make complete installation in less than ten hours' time.

Pipe required—1 piece 3-inch, 20 feet long; 1 piece 3-inch, 13 feet long; 1 piece 3-inch, 8 feet long; 1 piece 3-inch, 5 feet long; 1 piece 3-inch, 3 feet long; 2 pieces 2-inch, 13 feet long; 1 piece 2-inch, 12 feet long.

No. 370—Code-LOTUD—All apparatus and fittings, no pipe, weight about	lbs.
No. 371—Code-LOTYA—Galvanized pipe, cut to lengths, weight about	lbs.
No. 372—Code-LOTZE—Painted pipe, cut to lengths, weight about	lbs.



Junior Combinations



A N OUTFIT that is bought frequently by individuals for back-yard installation; requires small space; is not expensive, and shows great results in keeping the children at home and off the streets, at the same time providing excellent exercise. It is substantial enough for small school playgrounds and will fit in well with other apparatus. The swing, rings and trapeze are hung from ball-bearing hangers; all apparatus is galvanized and of standard approved type.

The pipe fittings are extra heavy malleable iron; frame set in concrete; base flange anchors furnished.

All frame pipe, 2-inch inside measurement, standard, galvanized or painted; see below.

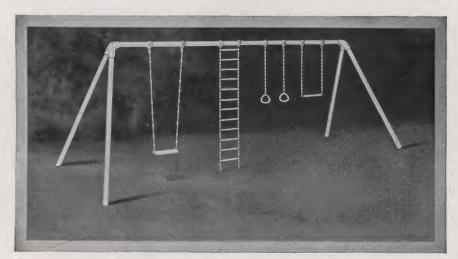
Capacity, three children at a time.

Height over all, 10 feet; length over all, 22 feet; width, 10 feet; ground space required, 25 feet by 25 feet.

One man should make installation in five hours.

Pipe required—1 piece 2-inch, 12 feet long; 4 pieces, 2-inch 13 feet long.

No. 340—Code—LOORZ—All apparatus and fittings, no pipe, weight about	lbs.
No. 341—Code-LOOSB—Galvanized pipe, cut to lengths, weight about 200	lbs.
	lbs.



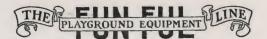
UITE similar to our No. 340. The only difference is that we have added an all-steel flexible ladder. In order to provide ample strength for the frame, the overhead pipe is of 3-inch inside measurement, standard. Because of this apparatus being larger and capable of accommodating more children, we must ask slightly more for it than the No. 340.

Two men should make installation in four hours' time.

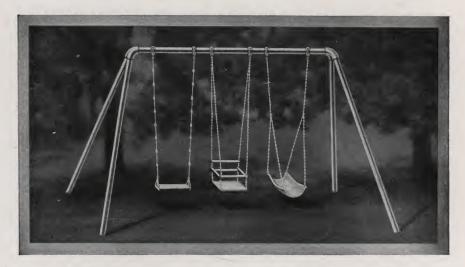
Height over all, 10 feet; width, 10 feet; length over all, 26 feet; space required for use, 25 feet by 30 feet.

Pipe required—1 piece, 3-inch standard, 15 feet long; 4 pieces 2-inch, 13 feet long.

No. 345—Code-LOPET—All apparatus and fittings, no pipe, weight about	lbs.
No. 346—Code-LOPIV—Galvanized pipe, cut to lengths, weight about	lbs.
No. 347—Code-LOPSA—Painted pipe, cut to lengths, weight about	lbs.



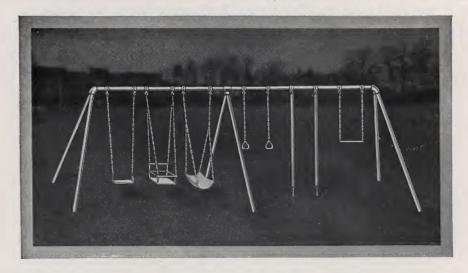
Junior Combinations



ESIGNED especially for small children; to be used either at home or on public playground; all apparatus standard approved goods, with ball bearing swing hangers and malleable iron overhead fittings. Three types of swings are here suggested, i. e., Standard, Chair and Scup. Any other assortment can be furnished at same cost.

Capacity, three children at a time.
Two men should install in four hours' time.
Height over all, 10 feet; length over all, 22 feet; ground space required, 10 feet by 22 feet.
Space required for use, 25 feet by 25 feet.
Pipe required—1 piece 2-inch, 12 feet long; 4 pieces 2-inch, 13 feet long.

No. 350—Code-LOPWO—All apparatus and fittings, no pipe, weight about	100	lbs.
No. 351—Code-LOPZY—Galvanized pipe, cut to lengths, weight about	210	lbs.
No. 352—Code-LORAV—Painted pipe, cut to lengths, weight about	210	lbs.



THIS combination is twice as large as the No. 350 and will double its capacity. The apparatus hung from this frame will accommodate wee babies in the scup, and the vigorous young athlete on the rings or trapeze; an ideal assortment for the small community playground; all swinging apparatus provided with noiseless ball bearing hangers. We have never known of any wearing out; a first-class, small outdoor gymnasium that represents very good value.

Height over all, 10 feet; length over all, 34 feet; width, 10 feet; frame set in concrete; iron base flange anchors included in price; ground space required, 25 by 30 feet.

Two men should make installation in less than seven hours' time.

Pipe required—2 pieces, 2-inch standard, 12 feet long; 6 pieces 2-inch standard, 13 feet long.

No.	355—Code-LOROZ —All apparatus and fittings, no pipe, weight about	lbs.
No.	356—Code-LORUB—Galvanized pipe, cut to lengths, weight about	lbs.
No.	357—Code-LORVA—Painted pipe, cut to lengths, weight about	1bs.





"Barrel-of-Fun"

THIS is an unique affair, but since its introduction a few seasons ago, it has become quite popular, and no playground is complete without it. This originated in the sourthern states by the children themselves. We have made a few changes in the construction to suit conditions on the average playground, and it is so made that, after once installed, it requires no further attention.

The barrel turns freely on the horizontal pipe axis, 2 feet above the ground. This axis, 10 feet in length, extends through the center of the barrel heads, and is supported at the extreme ends by uprights which are imbedded in concrete. The barrel is made especially for the purpose; constructed of steel; not a bolt, screw or rivet protrude to cause injury or to tear the clothes. All parts are made as smoothly as possible.

Many feats of skill may be performed upon this barrel, such as balancing with the body in all conceivable positions, diving over, somersault, treadmill and a number of other stunts

"Barrel-of Fun" is a safe, durable, low-priced piece of equipment, and it will afford an unlimited amount of amusement and healthful exercise for the children; always in order and ready to use.

Ground space required for use—10 by 10 feet; height over all, 3 feet.

One workman should make complete installation in four hours' time

four hours' time.

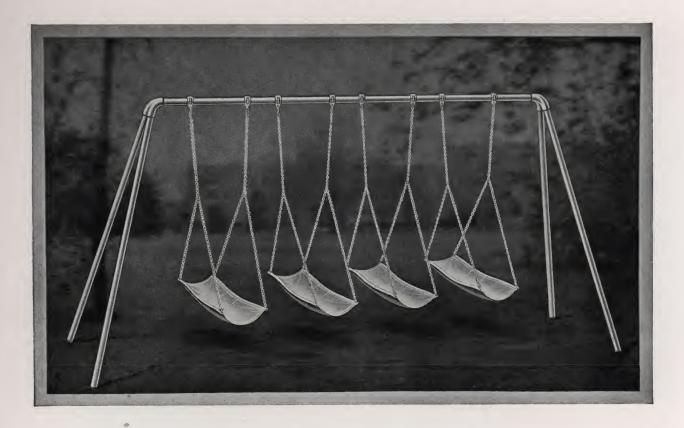
No. 290—Code-LOGUP—Complete, no pipe, weight about 140 lbs.

No. 291—Code-LOHAL—Galvanized pipe, cut to lengths, weight about 80 lbs.

No. 292—Code-LOHEM—Painted pipe, cut to lengths, weight about 80 lbs.







Baby Scup Set

BABIES like to swing outdoors as well as the kiddies, and there are thousands who get their daily sun bath in these scups. We have shown a standard four-swing unit with canvas scups, although it is possible to arrange frames and fittings for a greater number. Send for prices and other information on special outfits.

The frame is set in concrete; base flange anchors included in price; all fittings and hangers of approved type, heavy malleable iron; furnished with either ball bearing or plain bearing hangers.

Canvas scups, with galvanized steel frames and chains, are regular equipment and covered by price list. Space required for use not less than 25 by 30 feet.

Doctors and child health authorities recommend this outdoor form of treatment and amusement for wee babies. Capacity, four babies at a time.

We suggest this being used under our Shelter Shed, see page 33.

Height over all, 10 feet; length over all, 24 feet; width, 12 feet.

Two workmen should make complete installation in five hours' time.

Pipe required—1 piece 3-inch, 16 feet long; 4 pieces 2-inch, 13 feet long.

No. 330—Code-LONIT —Apparatus with ball bearing hangers, no pipe, weight about100	lbs.
No. 331—Code-LONOV—Apparatus with plain bearing hangers, no pipe, weight about	lbs.
No. 332—Code-LONRA—Galvanized pipe, cut to lengths, weight about	lbs.
No. 333—Code-LONSE—Painted pipe, cut to lengths, weight about	lbs.



Chair Swing Outfit

Built especially for the little tots.

Chair seats are of hardwood, filled and varnished in natural color; no paint to discolor clothing.

Safety round wood bar is $1\frac{1}{4}$ inches, slides easily up the front chains, allows entrance to seat. Bar falls back in place across the lap, making it safe for the little ones. Four small link, machinemade, galvanized chains support these chairs; ball only stronger but it prevents the chairs from tilting to a dangerous angle. Supplied with either ball bearing or plain bearing swing hangers. For best results we recommend the ball bearing hangers, which cost but slightly more.

The overhead frame member is of 5-inch standard pipe; the slanting supports 2-inch standard pipe (inside measure given); heavier than that ordinarily used.

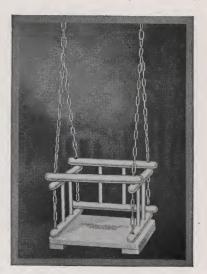
Ground space required for use-25 feet by 30 feet.

Frame set in concrete. Base flange anchors included in price.

All overhead fittings approved type, best quality heavy malleable iron.

Should be installed by two men in five hours' time.

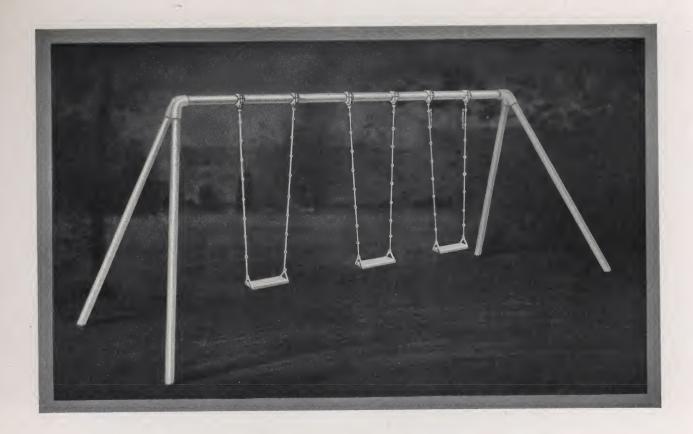
Pipe required—1 piece 3-inch, 16 feet long; 4 pieces 2-inch, 13 feet long.



No. 320—Code-LOLSO—With ball bearing hangers, all apparatus and fitting	gs, no pipe, weight
about	gs, no pipe, weight
No. 322—Code-LOLVY—Galvanized pipe, cut to lengths, weight about	

See Price List and Discount for Catalog No. 10





Three Swing Outfit

No Playground is complete without a Swing Set, one of the oldest forms of amusement and exercise known to childhood.

Our No. 313-B is a compact and very substantial outfit that will grace any playground or recreation center. Requires least possible ground space, and follows latest design and construction.

All frame pipe is standard 2 inch (inside measure). All overhead fittings best quality heavy malleable iron; ball-bearing (self-contained type) swing hangers that do not "squeak" yet require oil only once a season and last indefinitely; standard approved long link swing chains, links of 3/8-inch bright basic stock, which is considerably harder and of greater tensile strength than commonly used

for this purpose; improved new style flexible galvanized swing stirrups, running cross grain of hard wood seat boards.

These features all go toward making this a perfect Swing Set, and like all "Fun-Ful" Playground Equipment, it is guaranteed to be best value and entirely satisfactory.

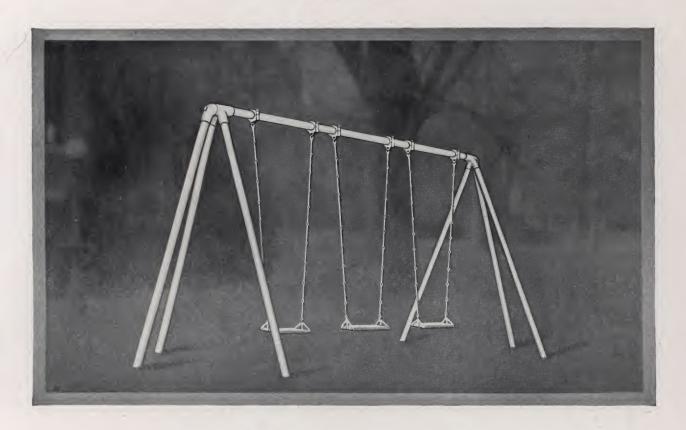
Space required for use, 25 feet by 30 feet.

Height over all, 10 feet; length over all, 22 feet; width, 10 feet at ground.

Two workmen should make installation in five hours' time.

Pipe required 1 piece 2 inches, 12 feet long; 4 pieces 2 inches, 13 feet long.

No. 313B—Code-LOKRE—All apparatus and fittings, no pipe, weight about	lbs.
No. 314B—Code-LOKRI —Galvanized pipe, cut to legnths, weight about 200	lbs.
No. 315B—Code—LOKRII—Painted pipe cut to lengths, weight about 200	lbs.



Standard Three Swing Outfit

THIS is considerably heavier and stronger than the average three swing outfit, but in the ten years we have been making them, not an injury has been reported, nor do we know of any ever wearing out. This is the regulation three swing playground outfit.

The No. 313 is nothing more than a smaller edition of our No. 310. We wish to call your particular attention to the overhead pipe. It is full 3-inch standard pipe and the six supports are 2-inch standard pipe; the swing hangers are the double race, self-contained ball bearing type and are not found on any other make of three swing outfit.

Long link swing chains and improved swing stirrups are furnished, such as are used on No. 310.

Frame set in concrete; base flange anchors included

in price. Two workmen should make complete installation in six hours' time.

Height over all, 12 feet; length over all, 25 feet; width over all, 12 feet; ground space required for use, 30 by 30 feet.

Frame pipe required—1 piece, 3-inch, 15 feet long; 6 pieces, 2-inch, 15 feet long.



No. 313—Code-LOKRO—All apparatus and fittings, no pipe, weight about	lbs.
No. 314—Code—LOKUS—Galvanized pipe, cut to lengths, weight about	lbs.
No. 315—Code-LOKYT—Painted pipe, cut to lengths, weight about	lbs.

See Price List and Discount for Catalog No. 10





Standard Swing Set

SWINGS are a necessary part of every playground and, although a comparatively simple piece of apparatus, it must be safe, function properly and last indefinitely. This apparatus complies with these requirements and, like all Fun-Ful equipment, it is guaranteed to give satisfaction when properly installed. The No. 310 is the best the market affords, and should not be compared to ordinary swing outfits.

The swing hangers are fitted with noiseless, self-contained, double race ball bearings, superior to anything yet devised for the purpose. These hangers are extra heavy, and are made of best quality malleable iron. They are each securely clamped to overhead member with suitable bolts. All other overhead fittings are of high grade mal-

leable iron, most improved type and extra heavy. Recently we adopted an improved malleable iron swing stirrup that permits greater flexibility, which is so much desired. It prevents warping of seat board and is very durable.

Swing chain links are of the approved long link type, 11 inches in length, 3/8-inch round steel wire of tremendous tensile strength.

Height over all above ground, 12 feet; length over all, 42 feet; ground space required, for use, 30 feet by 45 feet. Frame set in concrete.

Two men should make installation in eight hours' time.

Pipe required—2 pieces 3-inch, 15 feet long; 8 pieces 2-inch, 15 feet long; pipe cut to length.

No. 310—Code-LOKNA—Six Swings and all fittings, no pipe, weight about	lbs.
No. 311—Code-LOKOR—Galvanized pipe, cut to lengths, weight about	lbs.
No. 312—Code—LOKPE—Painted pipe, cut to lengths, weight about	lbs.

See Price List and Discount for Catalog No. 10



Basket Ball Backstop

WING to the tremendous interest displayed in basket ball, and the demand for good backstops, we have developed this one. It complies with the rules and regulations of the game. You need offer no apology for having two or more of these on your school ground or public playground, as they are neat and trim. They are set in concrete, and they will maintain a vertical position indefinitely. In the long run they are considerably cheaper than the ordinary homemade affair. The backstop proper is framed with heavy hardwood, well braced and bolted, faced with heavy perforated galvanized steel sheets, all being clamped to 3-inch pipe support. Backstop is perforated to reduce wind pressure, also to add to the appearance. Installation time, one man 6 hours per pair.

No. 280—Code-LOFJA —Pair backstops with fittings, but no goals or pipe, weight about......200 lbs.

No. 283—Code-LOFYP—Pair galvanized steel, 3-inch pipe, uprights with base flanges and caps, weight about 242 lbs.

No. 284—Code-LOGAK—Pair puinted steel, 3-inch pipe, uprights with base flanges and caps, weight about.....242 lbs.

Goals and Nets

(Outdoor)

It is a well-known fact that both cotton and leather nets for basket ball goals endure for a very short time out in the weather. We have, therefore, designed this special goal, using



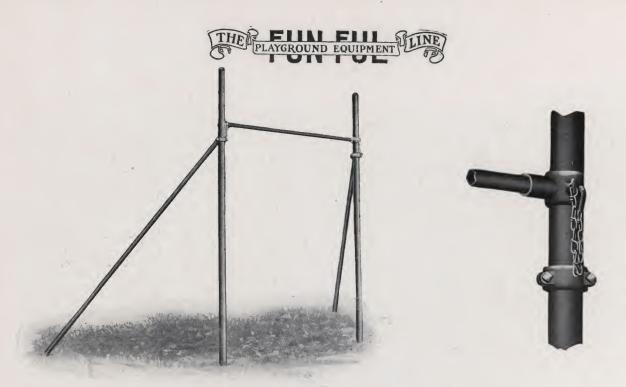
galvanized chain for the net; official in every respect.

Please note the following features:

- 1. Chain net attached substantially to the ring, leaving no projections, thus making an absolutely smooth surface of the ring.
- 2. By arranging chains in loops, which pass through ring at bottom, there is no possibility of a tangle.
- 3. When the ball drops into basket it hesitates momentarily and then rolls out; no chance of error in decision on part of referee.
- 4. Economy—costs less than leather and only a little more than cotton, and will outwear several of either.
- 5. By use of smooth chain, wear on ball is minimized.
- 6. May be used indoors at a great saving; in fact, is already in use as official goal in some Y. M. C. A.'s. Regular cotton net is furnished if desired.

No. 281—Code-LOFKE —Pair official goals only, with cotton net, weight about....... 18 lbs.

NOTE—Basketball backstops and goals quoted by the pair. Ten feet from goal rim to ground. Regulation outdoor basket ball court, 60 feet by 94 feet.



Horizontal Bar Outfit

THIS is an excellent piece of apparatus for anyone's back-yard and will afford good, healthful exercise for young and old alike; approved by park and playground authorities. No. 275, as illustrated, is constructed with 2-inch galvanized pipe uprights and 1½-inch tubular braces.

Space required for use—12 by 12 feet.

One man should make installation in four hours' time.

No. 274 is without braces, but with 3-inch galvanized pipe uprights; this type occupies less space. Space required for use—12 by 12 feet. One man should make installation in three hours' time.

Both types are furnished with solid cold rolled steel "bar" six feet long and with galvanized malleable adjustable fittings, base flanges and top finish caps furnished.

Height, 8 feet; both members set in concrete.

No. 274—Code-LOETZ—Complete, with 3-inch uprights, no braces, weight about 200 lbs.

No. 275—Code-LOEVB—With 2-inch uprights with braces, weight about 210 lbs.



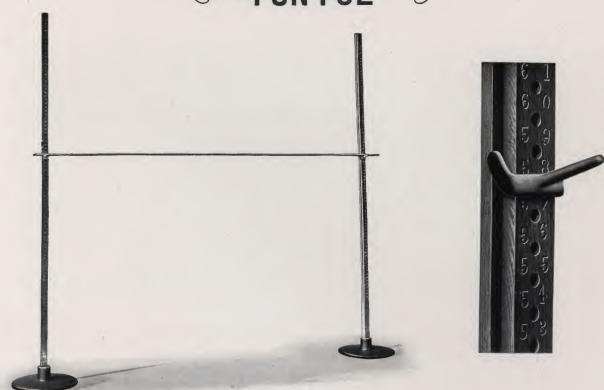
Parallel Bars

A LTHOUGH a simple piece of apparatus, it is unusually well made. It is permanently set in concrete and will give years of service without additional expense. No play ground is complete without one or more. This piece is quite popular. The bars are of round cold rolled steel, 10 feet in length, finished smoothly, 13/8 inches in diameter, supported by 2-inch pipe uprights. The entire apparatus is galvanized; base flange anchors included in price; sold complete with pipe, only one size and style.

Space required for use—6 by 18 feet.

No. 260—Code-LODAH—Complete as shown, shipping weight about.....

....230 lbs.



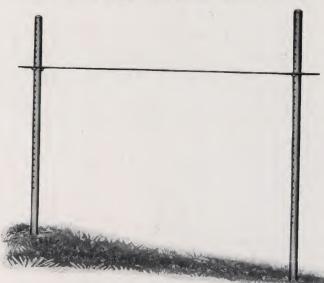
Portable Jump and Vault Standards

Suitable for indoor use; complies with athletic rules and regulations throughout the United States; substantially made and nicely finished.

No. 272—Code-LOENS—Portable Wood Jump Standard, 6 feet high, heavy metal base, 1 inch

graduations; special adjusting pins; complete weight about 50 lbs.

No. 273—Code-LOEPT—Portable Vault Standards, same as No. 272, except 10 feet high; weight



Fixed Jump and Vault Standards

ADE of 2-inch pipe vertical standards galvanized inside and out; base flange anchors furnished for imbedding in concrete; upper ends of pipe fitted with galvanized finished caps; holes drilled for gauge stick pins, 2 inches apart. One man should make complete installation, either type, in two hours' time.

No. 270—Code-LOEFK—Fixed Jump Standard, 6 feet above ground, complete, weight about ... 70 lbs.

No. 271—Code-LOEJN—Fixed Vaulting Standard, 12 feet above ground, complete, weight. 120 lbs.

Vault pole not included; gauge stick not furnished.





Ideal Small School Set

THESE four pieces were selected from the Fun-Ful line by the department of physical training of the public schools for one of our most progressive states. They were selected and recommended for the use of the small sized school of not more than fifty pupils.

These goods are of the same high quality as used on the playgrounds of our greater cities.

The set consists of one each our Nos. 230 and 231 four-board seesaw outfit; No. 410 slide with rust resisting metal chute bed way; Nos. 221 and 224 Giant Stride; Nos. 313 and 314 three-swing outfits, all standard approved apparatus.

Because of the popularity of this particular selection, its adaptability and convenience to customers in making a selection, we cover the entire set by one catalog number.

As it is possible to produce these complete sets in large numbers, production costs are lowered and selling expense is less. We offer the complete set as here illustrated, at a considerable saving to the buyer. Please bear in mind that these are standard, approved goods, as illustrated and described in detail elsewhere in this catalog. We have not sacrificed quality to favor a lower price; we only offer a greater inducement to buy a complete playground equipment, making it possible for more children to enjoy it and to derive healthful benefit by its use.

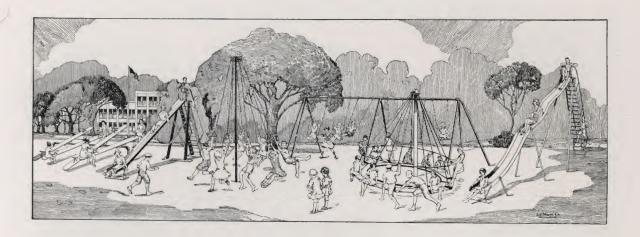
Capacity, nineteen children at a time, plus 60 "slides" per minute on the chute.

Our special price on the set includes all frame pipe, galvanized inside and out, rust resisting metal bed way on slide chute, all steel ladders on Giant Stride, and all fittings, parts and pieces necessary for the complete set—ready to install.

This set should not be placed on ground space of less than 3000 square feet.

Complete installation should require six men eighteen hours' time.

See Price List and Discount for Catalog No. 10



Playground Set

A SIX piece set that has been selected by the greatest known authority on playground outfitting—Mr. O. W. Douglas.

Selected for the convenience of those not familiar with playground requirements and for the average newly established play centers.

In consideration of cost of apparatus and ground space required, this is exceptionally well selected. Taken from a capacity standpoint, it represents unusual value, as, to accommodate more children successfully, much more expensive equipment would be necessary on equal space.

No less than 5900 square feet should be considered for the safe and satisfactory use of this set.

The set consists of one each our No. 230-231 Fourboard Seesaw; No. 410 Slide with Armco iron bed way; No. 221-224 Eight Ladder Giant Stride with metal ladders; No. 310-311 Six-Swing outfit; No. 201 Ocean Wave; No. 450 Large Single Slide with Armco iron bed way.

Labor hours for installation may be determined by adding hours required for each piece as given.

All of these are illustrated and described separately elsewhere in this catalog.

This method of selling complete playground outfits in sets has proven quite popular and has made possible lower selling expense and manufacturing cost, of which we give our customers the benefit. It must not be overlooked that all apparatus included here is of standard approved quality, just the same as used by a majority of parks and playgrounds of our greater cities. We manufacture one grade, of best quality only.

Our special price on this set includes galvanized frame pipe, Armco iron bed way on the slides, metal Giant Stride ladders galvanized, everything complete ready to install. This is shipped complete all in one shipment and avoids delay, anxiety, trouble and unnecessary expense on the part of the customer; truly the modern way of buying play equipment.

This represents unusual value and a quality that cannot be equalled.

See Price List and Discount for Catalog No. 10

Some of Our Standard Fittings



No. 150—Single Ell For 3-inch horizontal and vertical pipe. Wt. 10 lbs. 8 oz.



No. 151—Double Ell For 3-inch pipe all around Wt. 16 lbs., 10 oz.



No. 152—3 x 3 x 3 Tee. Wt. 11 lbs., 8 oz. No. 291—2 x 2 x 3. Wt. 11 lbs., 8 oz.



No. 153 No. 153—3 x 3 x 2 Tee. Wt. 13 lbs., 12 oz. No. 154—2 x 2 x 2 Tee. Wt. 5 lbs.



No. 155
2-way Center Spread, 3-inch horizontal and 2-inch upright pipe.
Wt. 12 lbs., 13 oz.



No. 155X
2-way Center Spread, 2-inch horizontal and 2-inch upright.
Wt. 11 lbs.



No. 156
3-way Center Spread for 3-inch horizontal and 2-inch upright pipe.
Wt. 14 lbs., 4 oz.



No. 157
3-way End Spread for 3-inch horizontal and 2-inch uprights.
Wt. 12 lbs., 12 oz.



No. 158
4-way Center-run for 3-inch pipe both ways. Wt. 23 lbs., 4 oz.



Complete Ball-bearing Clamp for flying rings, trapeze and swing 3-inch pipe. Wt. 4 lbs. No. 159A—For 2-inch pipe. Wt. 2 lbs., 11 oz.



No. 160
Ball-bearing Hanger used with wood frame swing sets.
Wt. 2 lbs.



No. 161 Used with Traveling Rings. For 3-inch pipe only Wt. 4 lbs.

Pipe Sizes Are Inside Measurements



No. 162
Complete Clamp for flexible ladders and climbing pole, 3-inch pipe.
Wt. 3 lbs., 4 oz.
No. 162X—For 2-inch pipe. Wt. 2 lbs.



No. 163
Tee Clamp complete, 3-inch horizontal and vertical pipe.
Wt. 6 lbs., 11 oz.



No. 164
2-way End Spread. For 3-inch horizontal and 2-inch upright pipe.
Wt. 15 lbs., 5 oz.



No. 164X 2-way End Spread, 2-inch horizontal, 2-inch upright pipe. Wt. 15 lbs.



No. 165
3-way Center Spread, 3-inch horizontal, 3-inch upright pipe.
Wt. 18 lbs.



No. 388
Complete Guard Rail for vertical ladder and sliding poles, 3-inch horizontal, 2-inch and 1½ inch upright pipe. Wt. 18 lbs.



No. $176-1\frac{1}{2}$ -in. slanting base flange. Wt. 3 lbs. No. 177-2-in. slanting base flange. Wt. 4 lbs., 8 oz.

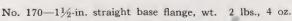


No. 246
3-way Right Angle End Spreads.
3-inch horizontal, 2-inch upright pipe.
Wt. 14 lbs., 12 oz.



No. 235
3-way Right Angle End Spreads.
2-inch horizontal, 1½-inch upright
pipe. Wt. 10 lbs., 13 oz.





No. 171—2 -in. straight base flange, wt. 5 lbs.

No. $172-2\frac{1}{2}$ -in. straight base flange, wt. 6 lbs. No. 173-3 -in. straight base flange, wt. 8 lbs., 4 oz.

No. 174—4 -in. straight base flange, wt. 12 lbs.

No. 175—5 -in. straight base flange, wt. 22 lbs., 4 oz.



No. 237—3-in. Hemispherical Pipe Cap, wt. 4 lbs. No. 238—2-in., wt. 1 lb., 4 oz. Note our special, rounded set screws which offer no danger either to the child or his clothing. Note also that these set screws are so placed as to be out of the way of the child in his activities. The toughest malleable iron is used in our fittings, except base flanges and pipe caps, which are of grey iron.

Ball Bearing Swing, Ring, Trapeze Hanger and Other Fittings



Cross Section



Self-contained Double Race Ball bearing



Cross Section



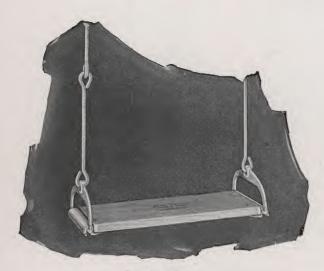
Slanting Base Flange



Base Flange Pipe Anchor



Seesaw Fulcrum Irons and Retaining Chain as used on Nos. 230 and 233.



Standard Swing



Metal Stairway and Sliding Pole Anchors





Park Swing

RDINARY park swings are unsatisfactory because of their poor construction, resulting in accidents and expensive upkeep.

We have, therefore, produced a swing that is substantial and will give many years' satisfactory service with least upkeep cost.

The seat slats are of heavy suitable wood, nicely dressed with rounded edges, not painted or varnished, to prevent any possible chance of soiling clothing; securely bolted to heavy steel frame.

This seat is supported by four heavy galvanized steel chains, which, in turn, swing from double race, noiseless ball bearing hangers that always function properly, with least resistance.

Overhead pipe fittings are heavy, galvanized malleable iron. The frame is set in concrete. Base

flange anchors are furnished and are included in price.

Ground space required for use-20 feet by 20 feet.

This swing, with all metal galvanized, and natural wood seat, suggests a safe, comfortable and clean place to rest. It must not be compared with a low-priced, inferior article. A permanent park fixture, that will prove less expensive in the long run.

Height over all, 8 feet; overhead frame member, 6 feet long; seat 5 feet long.

Two men should make installation in four hours' time.

Pipe required—1 piece 2-inch, 6 feet long; 4 pieces 2-inch braces, 11 feet long.

No.	2000—Code—MIAGZ—Park Swing, everything complete, no pipe, weight about	lbs.
No.	2001—Code-MIAGR—Galvanized pipe, cut to lengths, weight about	lbs.
No.	2002—Code—MIAGS—Painted pipe, cut to lengths, weight about	lbs.

See Price List and Discount for Catalog No. 10





Lawn Slides

(Portable)

ESPECIALLY designed for kindergarten, primary grades and home use, indoors or out; not recommended for public playground use.

Many of these slides are sold annually for private use. This demand has increased tremendously the last few years, owing to the desire of parents to keep their children off the traffic-laden streets.

These are made with the same care and thought as the large slides, and they are perfectly safe.

Chute bed ways are optional with the customer; either hardwood or rust-resisting metal is furnished at no difference in cost. Please let us know your choice.

Stairs and braces are of hardwood, well fitted and bolted.

These slides are portable, and, being light in weight, it is not a difficult matter to move them from place to place, as the sod shows wear.

These are attractively painted and varnished in either moss green or bright red; galvanized iron handrails; chute rails, inside and upper edge, in natural wood, filled and varnished.

Our No. 400 is made for tiny tots two to five years of age. It follows closely the general design and construction as shown above, except that it is collapsible. These slides are so small and light in weight that they are frequently used indoors. These little slides add much to the attractiveness and equipment of a modern nursery. Finish—bright red, except inside and top of chute rails, which are natural wood; galvanized handrails.

All slides here mentioned have a capacity of 30 "slides" per minute.

Any one should be assembled complete in less than one hour's time.

No. 400-Code-LOYDE-3 feet	high, 6 foot chute, space— 5 x 10 feet,	weight about
No. 401—Code-LOYED—5 feet	: high, 10 foot chute, space-10 x 20 feet,	weight about110 lbs.
No. 403—Code-LOYIF —6 feet	high, 12 foot chute, space—10 x 25 feet,	weight about 125 lbs.
No. 405—Code-LOYKT—7 feet	high, 14 foot chute, space—15 x 30 feet,	weight about150 lbs.

See Price List and Discount for Catalog No. 10



Lawn Play Apparatus

(Portable)

THIS costs more than most play things but is a real investment and will show big returns in years to come in the way of robust health for those privileged to use this apparatus in childhood.

This piece of play equipment might be looked upon as a life saving station because of its keeping children off the streets and dangerous highways.

The No. 362 is light in weight, portable and easily dismantled for shipment or winter storage. It is strong and well made with steel pipe frame and special malleable iron fittings, all metal galvanized. Standard approved playground slide, swing and rings.

Chute is 14 feet in length over all and is furnished with Armco rust resisting iron bed way or rock maple. Please state choice when ordering, no difference in cost.

Slide stairway is of hardwood, well fitted and bolted with galvanized steel handrails.

Heavy plank ground sill, bolted and well painted in moss green. No anchors or foundation required as it is of ample strength and rigidity to support, with safety, all the adults that might find room upon the apparatus.

Height over all, 8 feet 10 inches; width over all, left to right, 10 feet; sill 4 feet 8 inches by 7 feet 6 inches. Actual ground space required for complete outfit, 15 feet by 20 feet. Over-head pipe member, $1\frac{1}{2}$ inch; slanting supports $1\frac{1}{4}$ inch, all U. S. standard pipe.

Time for assembly, 1 hour by one man. One auto wrench and screw driver are all the tools needed to set up this apparatus.

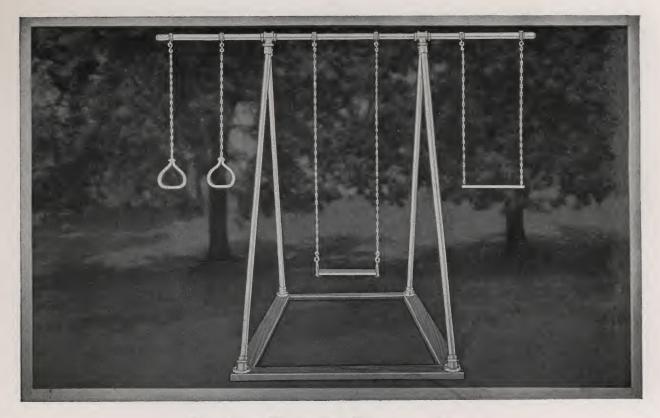
Capacity, two children at a time, plus 30 "slides" per minute on chute.

Offered in this one model and is sold complete with frame pipe only.

No. 362-Code-LOSOB-Shipped knocked down, boxed and crated, weight about.....590 lbs.

See Price List and Discount for Catalog No. 10





Junior Lawn Gymnasium

(Portable)

Our greatest wish is that every parent might know the real value of this small gym. One of these should be in the back yard of every family with growing children. Fifteen minutes' outdoor work per day on this is equivalent to forty minutes' indoor gymnasium exercise; furthermore, it is a lot more fun. You won't have to threaten punishment to make the youngsters use it.

The No. 361 is small, light in weight, portable and easily dismantled for moving or storage; shipped complete in one box; intended for private lawn use, but it will prove to be a popular acquisition to any playground. It is strongly and substantially made entirely of steel and malleable iron, except the hardwood base and swing seat board; all metal galvanized; rings, swing and trapeze standard apparatus as used on our large playground apparatus; a small, compact,

health-building station, with a great element of real fun attached.

Capacity, three or four children at a time.

At a little extra expense, we can furnish an adjustable, galvanized steel horizontal bar. The extra piece of apparatus attaches to the two forward slanting supports and requires no more ground space. This bar is also quickly demountable.

Height over all, 7 feet 10 inches; width over all, left to right, 10 feet; base size, 4 feet 8 inches by 7 feet 6 inches; overhead pipe member, $1\frac{1}{2}$ -inch; slanting supports, $1\frac{1}{4}$ -inch U. S. standard pipe inside measure.

Space required for use—15 feet by 20 feet. Assembly time, one hour.

Bolted, no screws or nails used. One model only. Sold complete with frame pipe only.





Lawn Play Frame

(Portable)

A NSWERING a demand for a small portable play outfit suitable for indoor or outdoor use at the home, we have developed this number for children, four to ten years of age; extremely simple in design and construction, yet serves the purpose admirably.

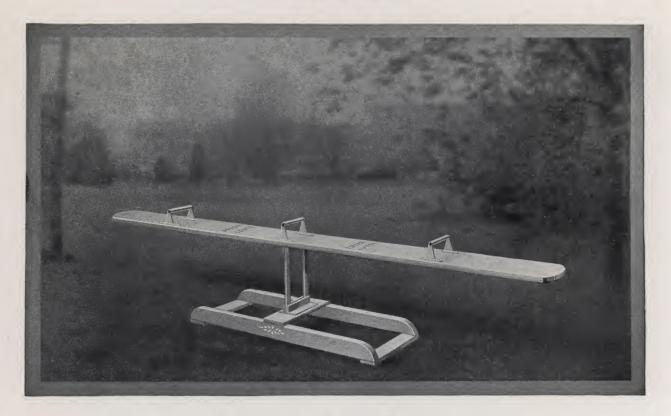
Upper frame of galvanized ¾ inch pipe (inside measure) base sill of flat bar steel; special fittings of galvanized malleable iron.

Swing, rings and trapeze chains, galvanized steel of a strength ample to support adults or as many children that might find room on the apparatus. Height over all 6 feet, 6 inches; width 5 feet, depth 8 feet, 3 inches. Actual ground space required to use this number safely, 5 feet by 14 feet.

Made entirely of steel and malleable iron, galvanized except the wood seat board in the swing; light in weight and easily dismantled. It may be moved or stored with little effort.

There is nothing in our line that represents better value than this little apparatus. One man should make complete installation in one hour's time. One size and model only.

See Price List and Discount for Catalog No. 10



Lawn Steelflex Seesaw

(Patent Applied For)

NEW idea in a portable Seesaw. Board supported by vertical, parallel, spring-steel leaves, upper and lower ends firmly clamped to board and base at their centers. Rocking action is gained through the flexing of the springs and is quiet in its operation. Springs bend slightly, not to a degree that fatigues the metal. One need have no fear of their breaking. Distance traveled by the board is the same as of the conventional Seesaw with board of equal height and length, yet, because of springs, board ends cannot suddenly strike the ground causing jar to spine.

This may be operated with greater speed and less effort by one, two, three or four children, it not being even necessary to kick the feet on the ground, as a slight measured to-and-fro action of the body of one or more children in unison will create the desired action and sensation; a new self-contained, safe, strong play machine, very simple in design, a marked improvement over the old.

For children four to twelve years of age.

Board of selected clear stock, 10 feet long; 10 inches wide, $1\frac{1}{4}$ inches thick; height over all 24 inches.

Attractively painted and nicely finished. Designed for home use, indoors or out, and not intended for public playgrounds; space required for use, 3 feet by 12 feet.

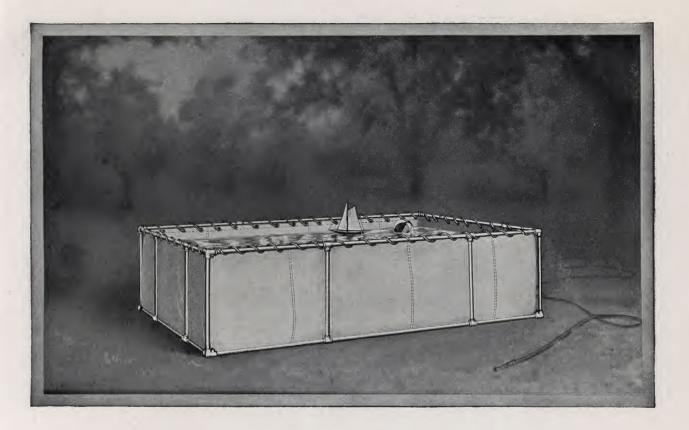
Can be uncrated and assembled by one man in thirty minutes.



No. 240—Code-LOATY—Complete as shown, packed for shipment, weight about.....

...120 lbs





Lawn Play Pool

(Portable)

FEW things appeal stronger to the children than water.

Those not fortunate in living near natural bodies of water can now be provided with a small, private pool, at little cost and inconvenience. A quick collapsible, galvanized, steel tube frame supports a water-proof, heavy canvas tank.

This may be assembled upon the lawn and filled with water from the garden hose within an hour. Tank provided with an overflow and drain hole with rubber plug, very much the same as a bath tub.

The small amount of water required, is not as a rule, an expensive item, and should not be looked upon in this light because of the pleasure and health derived.

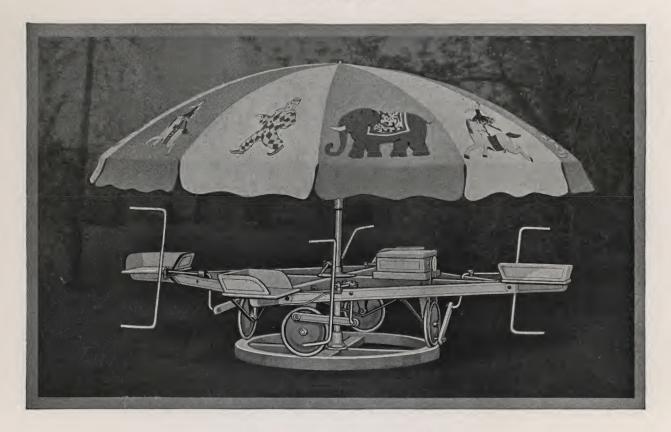
The water drained out upon the lawn saves just this much sprinkling, and thus the water serves a double purpose.

Small children, with the utmost safety, may, in this way, enjoy the water outdoors during the warm weather—paddling, splashing, and playing with toy boats—and what a place to bathe the dog.

Overcoming water fear and learning to swim should be a part of every child's early education.

This is intended for youngsters three to ten years of age.

The pool is five feet in width, eight feet in length, two feet in depth; Overflow, four inches below top, allowing the water to be no more than twenty inches deep.



Lawn Carrousel

THIS juvenile carrousel proves tremendously popular with children ranging in age from four to twelve years. An elegant outfit that becomes the finest for home and lawn and a source of lasting pleasure and healthful exercise for the little ones.

Finished in the brightest colors that so strongly appeal to the youngsters.

Propelled from any one or all seats, each rider pulling his share of the load; extremely light running and quiet in its operation.

Simple in design, light weight in construction, yet substantial and strong and safe to use. Being portable it may be conveniently moved from place to place upon the lawn as sod shows wear.

Measures 10 feet across and is 2 feet in height without umbrella, which is extra.

Umbrella of heavy duck is done in bright contrast-

ing colors and adds much to its attractiveness and size of the whole affair, besides the shade it provides on hot sunny days.

To add to its charm we have provided for, and can furnish at nominal extra cost, a small organ that operates by means of a belt from one of the drive wheels. Records of several popular pieces go with the organ, thus avoiding a monotonous tune.

We have spared no pains in making this machine attractive in color and finish; workmanship is of a high order and it has proven, for over a period of many years, a design and construction that is highly satisfactory.

This carrousel, however, is not designed or intended for public playground use, but for private lawn and home use, indoors or out.

Ground space required—14 feet in diameter. No foundation needed; may be assembled by two men, using wrench and hammer, in one hour's time.

See Price List and Discount for Catalog No. 10



Approximate

Material, Labor and Number of Men Required for Assembly and Installation of Fun-Ful Equipment.

Catalog Page		Equipment	Fixed or Portable	Sacks Cement	Cu. Yds. Gravel	Total Hours	Number of Me
7	220-1	Giant Stride	F	2	1/2	5	2
9	201	Ocean Wave	F	2	1/2	10	2
11	215	Merry-Go-Round	F	3	3/4	10	2
12	227	Cycle Stride		2	1/2 1/2 3/4 1/2 1/2 1/2 1/4	10	2
14	470	Slide		3	1/2	10	5
15	471	Slide		2	12	10	5
16	430	Slide		1	1/	8	3
19	440	Slide		1	74	2	2
17	450	Slide		2	1/	4	3
18	410			4	1/2		
60		Slide 405 Slides				1	2
21	490				1/	1	1
	150	Slide		3	1/2	6	4
22	484	Slide		4	1	4	6
24	238	Seesaw				1	1
26	233	Seesaw		1	1/4	4	1
27	230	Seesaw		1	$\frac{1}{4}$	- 5	1
27	237	Seesaw		1/2	$\frac{1}{4}$	2-	1
29	250	Ladder		$1\frac{1}{2}$	1/2	5	2
28	326	Teeter Ladder	F	1	1/4	5	2
32	301	Traveling Ring	F	3	1.	16	4
30	295	Circular Traveling Ring	F	2	1/2	10	2
37	375	Combination		4	1 1	25	5
38	380	Combination		5	11/2	30	5
39	385	Combination	F	8	2 2	50	5
63	363	Lawn Play Frame				1	1
62	361	Junior Combination				î	1
61	362	Junior Combination				2	1
40	367	Combination		11/2	1/	5	2
42	370	Combination		3	1%	10	3
41	389	Combination	-	1	1 2	15	3
43	340	Combination		11/	1/	5	1
43	345	Combination		11/2	73	4	2
44	350	Combination		11/2	73	4	
44	355			1/2	1/3	7	2
59	2000	Combination		11/	72		2
47	320	Park Swing	F	1/2	1/3	4	2
46		Chair Swing	F	1/2	1/3	5	2
	330	Baby Scup		1/2	1/3	5	2
48		Swing Outfit		1½	1/3	5	2
49	313	Swing Outfit		2	1/2	6	2
50	310	Swing Outfit		3	1	8	2
45	290	Barrel of Fun		1	1/4 1/4	4	1
52	274	Horizontal Bar Outfit	F	1	1/4	4	1
52	275	Horizontal Bar Outfit	F	1	1/4	3	1
52	260	Parallel Bars		2	1/3	4	2
53	272	Vault Standards		1	1/4	2	1
53	271	Jump Standards		1	1/4	2	1
51	280	Basket Ball Backstops		2	1/2	6	2
54	3000	School Set	P & F	5	11/2	18	6
55	5900	Playground Set		10	3 2	41	14
13	262	Revolving Parallel Bar		3	3/4	8	2
33	2500	Shelter Shed		12	6	32	4
36	364	Combination		7	31/2	8	i
25	241	Steelflex Seesaw		1	1/4	3	1
64	240	Lawn Steelflex Seesaw	P	1	/4	1	1
63	363	Lawn Play Frame				î	1
66	317	Lawn Carrousel				1 4	2
65	500	Lawn Play Pool.				1	1

The work of assembly and installation of Fun-Ful apparatus requires only ordinary mechanical skill.

All apparatus should be set level regardless of the ground contour.

Vertical supports should be absolutely perpendicular, a thing not difficult to attain with square and level or plumb bob. The correct angle of the slanting supports and braces is in most cases determined by their fittings.

Apparatus that is set in concrete should be protected until concrete has had ample time to harden. Every means should be employed to prevent children or anyone else from moving frames or supports while cement is in plastic state, otherwise, the purpose of the concrete is defeated.

All equipment should be carefully inspected; every screw, nut and bolt tried in order to know for an absolute certainty that everything is in perfect order.

All apparatus should be regularly inspected by some competent person. We make Fun-Ful equipment with the very best material and workmanship and give particular attention to lubrication and weather protection, but like all other things subject to wear and the action of the elements, every care given will add materially to the general good service and satisfaction.



Description of Individual Apparatus Used in Various Combinations

Chutes

		Citates		
No. 451-	-Code-LUCKT-	-30-foot wave type chute, only, with fittings, as used on No. 450 slide, page 17, weight about54	0 1	bs.
No. 456-	-Code-LUEVG -	-30-foot straight type chute, only, with fittings, as used on No. 455 slide, page 17, weight about .54 -24-foot straight type chute, only, with fittings, as used on No. 460 slide, page 17, weight about .43	0 1	bs.
No. 449-	-Code-LUDYS -	-20-foot wave type chute, only, with fittings, as used on Nos, 432-435 slide, page 16, weight about36	0 1	bs.
No. 448-	-Code-LUDUR-	-20-foot straight type chute, only, with fittings, as used on No. 446 slide, page 19, weight about 36	0 1	bs.
No. 441-	-Code-LUCYR-	-16-foot wave type chute, only, with fittings, as used on Nos. 440-415-425-435 slides,		
No. 421-	-Code-LUAKS -	weight about 220- -16-foot straight type chute, only, with fittings, as used on Nos. 410-420-430-445 slides,	0 1	05.
140. 721	Code Domino	weight about	0 1	bs.
		Ocean Wave Parts		
No. 205-	-Code-LIUZD -	Head and socket, only, weight about	5 1	bs.
No. 206-	-Code-LIVAT -	Outer circle, only, weight about	5 1	bs.
No. 207-	-Code-LIVEV -	Rods, only (10), weight about 11. Bumper ring, only, weight about 17.	0 1	bs.
No. 208-	-Code-LIVUY -	-Bumper ring, only, weight about 25	0 1	bs.
No. 210-	-Code-LIVOZ -	-Guard, only, weight about 4	0 1	bs.
		Flying or Traveling Rings		
No. 306-	-Code-LOIUR -	Steel tubing with No. 159 or No. 161 ball bearing clamps and chain, each, weight about7	1	bs.
No. 307-	-Code-LOJYS -	Cast aluminum, with No. 159 or No. 161 ball bearing clamps and chain, each, weight about 71/2	4 1	bs.
		Wood Teeter Ladder		
No. 366-	-Code-LOTAY -	-With fittings, each, weight about2	5 1	bs.
		Steel Teeter Ladder		
No. 329-	CodeLONAR -	-With fittings, each, weight about	5 1	bs
1101 023		Seesaw Boards and Parts		
NT- 046	C-1- LODEA	Board with fittings, only, each, weight about	5 1	he
No. 240-	Code-LOBGE -	—Board with littings, only, each, weight about	61	bs.
No 248-	Code-LOBIO -	-Handles, only, each, weight about	2 1	lbs.
No. 249-	-Code-LOBLY -	Collars, only, for pipe, each (1 required for each board), weight about	1	bs.
		Horizontal Bars		
No. 268- No. 269-	-Code-LODYN- -Code-LOECH-	—Bar with either pin or hinged clamp fittings for 2-inch pipe, each, weight about 2—Bar with either pin or hinged clamp fittings for 3-inch pipe, each, weight about 2	5 1 5 1	bs.
		Trapeze		
No. 358-	-Code-LORWE-	-Complete with chain and ball bearing clamps, each, weight about 1	5 1	bs.
No. 359-	Code-LORZO -	-Without clamps, each, weight about	7 1	bs.
		Standard Swings		
No. 308-	-Code-LOKAN-	Complete with ball bearing clamps, each, weight about	8 1	bs.
No. 309-	-Code-LOKEP -	-Without clamps, each, weight about	0 1	bs.
		Flexible Ladder		
No. 378-	-Code-LOUSC -	—Complete with clamps and anchors, each, weight about	½ 1	lbs.
		Climbing Pole		
No. 379-	-Code-LOVAZ -	—Complete with clamps and anchors, each, weight about	5 1	bs.
110. 373	Code Doving	Vertical Steel Ladder		
NT. 202	C-1- LOVCY	-16-feet long with anchors, each, used with sliding poles on combinations, weight about12	5 1	lhe
No. 383-	-Code-LOVGY-		3 1	103.
		Steel Sliding Poles (Galvanized)	1	
No. 384-	-Code-LOVIC -	-20 feet long with anchors, per pair, weight about	0 1	lbs.
		Guard Rails for Vertical Ladder and Sliding Poles		
No. 388-	-Code-LOVZA -	—With fittings, per pair, weight about	5 1	bs.
		Chair Swings		
No. 324-	-Code-LOMER-	-Complete with ball bearing fittings, weight about 201	4 1	bs.
No. 325-	-Code-LOMRE-	-Complete with No. 162 fittings, weight about	1	lbs.
		Baby Scups	,	
No. 334-	-Code-LONVO -	-Complete with ball bearing fittings, weight about 151	2 1	bs.
No. 335-	-Code-LON Y X-	-Complete with No. 162 fittings, weight about	A	US.
		San Price List and Discount for Catalog No. 10		

See Price List and Discount for Catalog No. 10







HILL-STANDARD